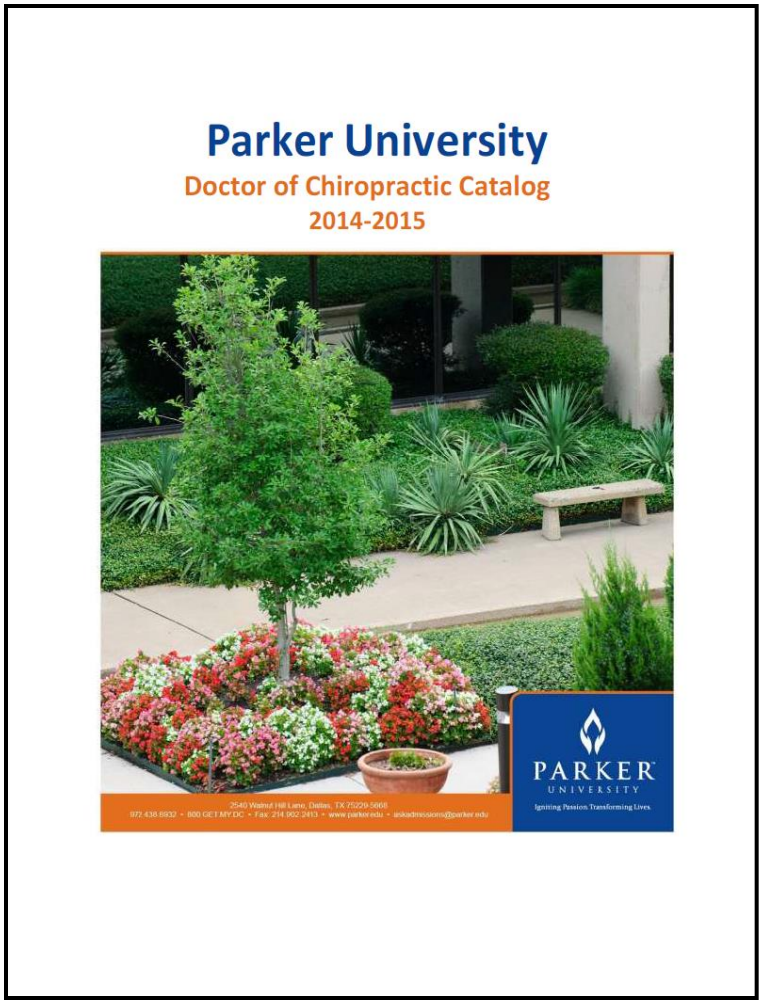
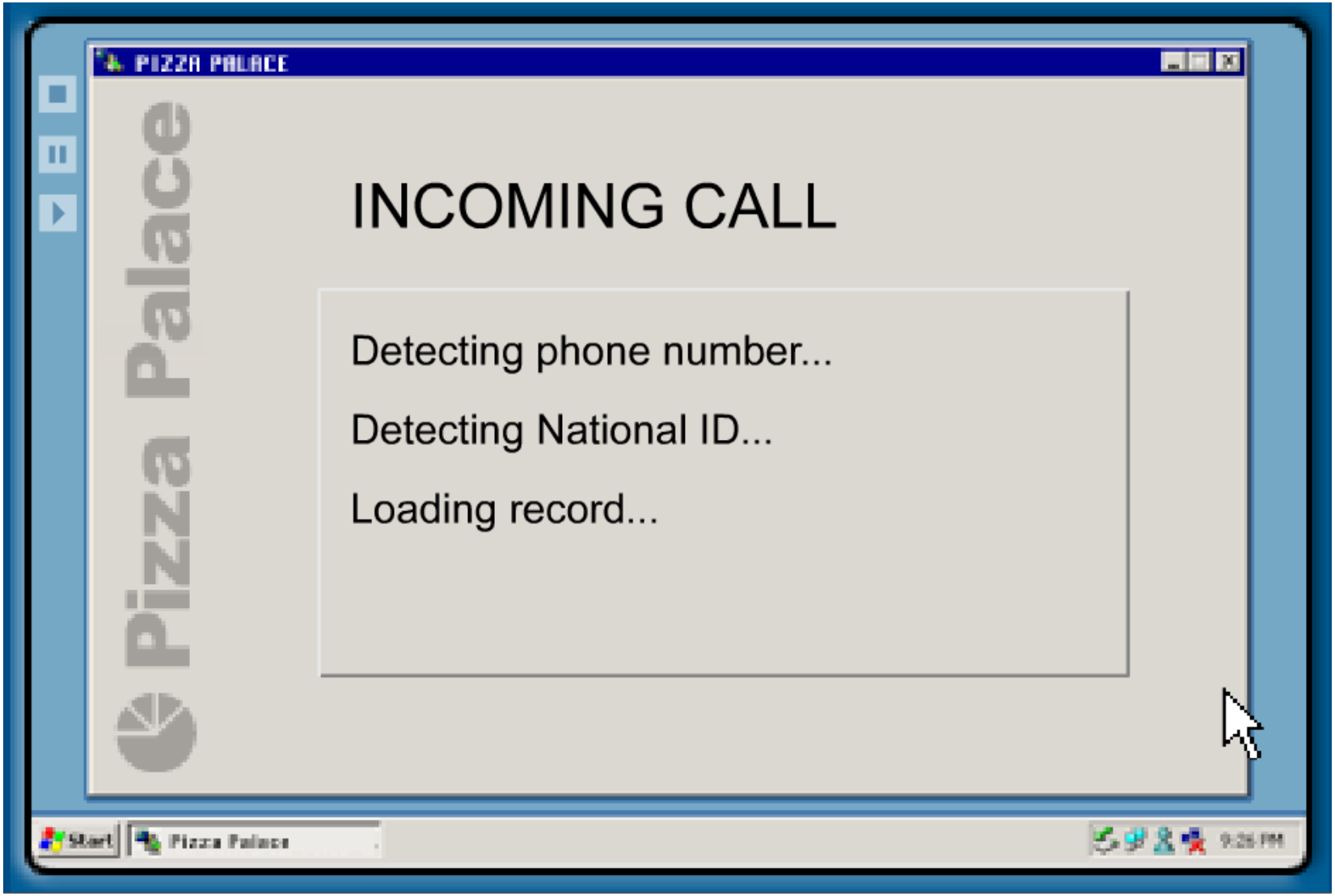
Changing Health Trends

Wellness Concepts

- The Mission of the Doctor of Chiropractic Program is to educate individuals in chiropractic wellness to be leaders in education, research, and service as primary care physicians and gatekeepers for direct access to the health delivery system.



Nationalization of Health Information?



http://www.aclu.org/pizza/images/screen.swf

Wellness and Health Promotion are in the News Every Day

USA TODAY
A GANNETT COMPANY

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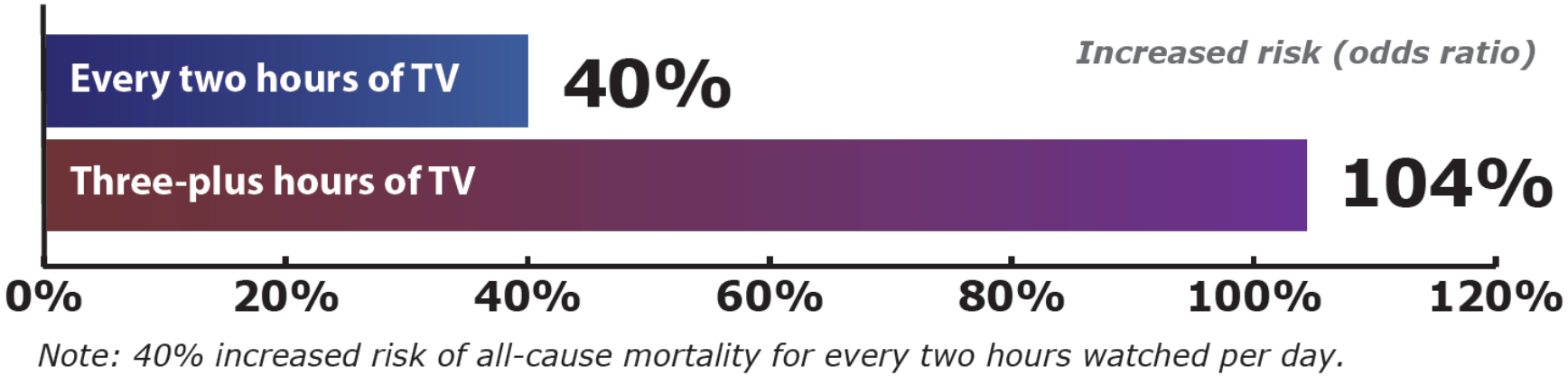
Study: Watching too much TV could lead to early death

Hoai-Tran Bui, USATODAY 4:05 p.m. EDT June 25, 2014

380 CONNECT | 71 TWEET | 1 LINKEDIN | 1 COMMENT

Watching television isn't just slowly killing your brain cells, it may be slowly killing you. Researchers found that people who watched three or more hours of television a day were at twice the risk of an early death than those who watched less.

Watch More TV = Less Time to Enjoy It?



Note: 40% increased risk of all-cause mortality for every two hours watched per day.

Television viewing was directly associated with all-cause mortality.

Television viewing, computer use, time driving and all-cause mortality
J Am Heart Assoc. 6-25-14 http://www.ncbi.nlm.nih.gov/pubmed/24965030

"Health care's old school relied on ***the rule of more*** to make the sick well—more technology, more tests, more treatment, more pharmaceuticals. That school is about to be let out. By every evidence-based measure now available to us, more intensive health care is not the best medicine for what ails America's health."

Risa Lavizzo-Moureym, MD, MBA
President and CEO
Robert Wood Johnson Foundation

Robert Wood Johnson Foundation

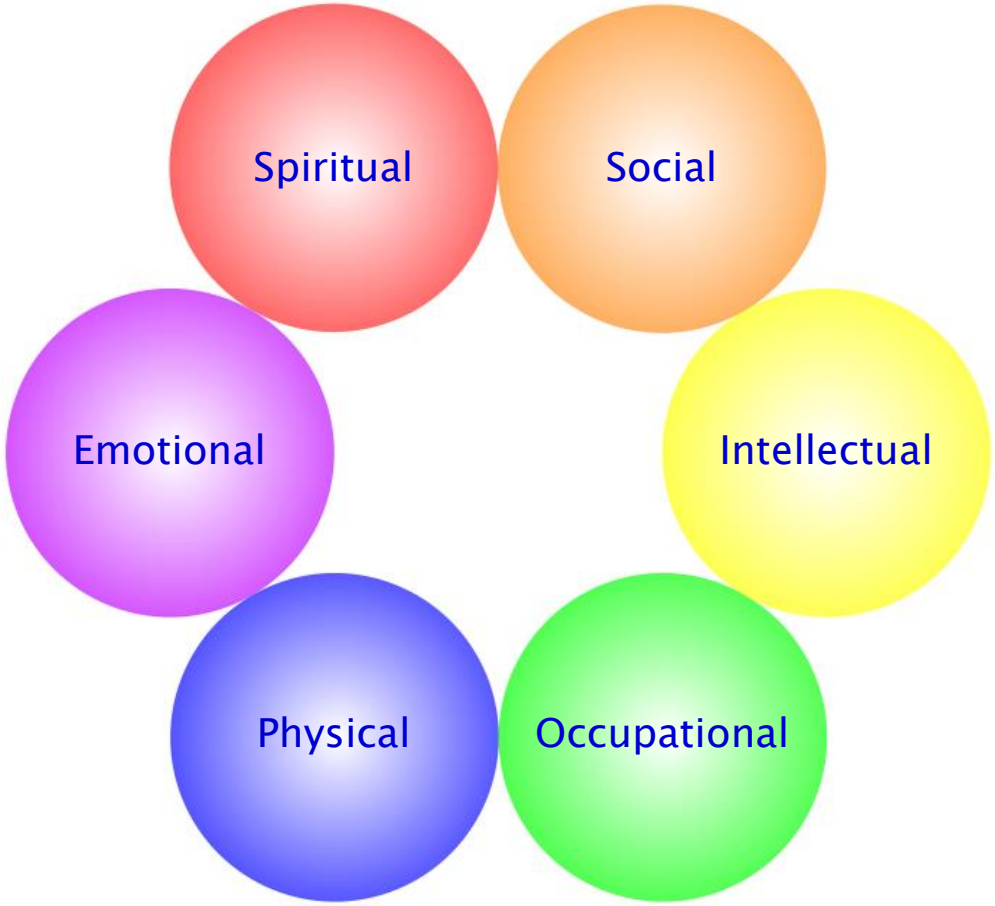
Highlights from America's Health Rankings

- Poverty kills as many Americans as cigarette smoking
- 95% of everything spent on health care supports a sick care system or biomedical research
- < 5% is spend on public health and disease prevention
- 32% of children and adolescents in the US are overweight or obese (more than 23 million kids and teenagers)
- America's teens are the fattest in the world
- Most will grow up to be overweight or obese adults at greater risk for a host of costly and debilitating diseases

What is “Wellness?”

“Lose some weight, quit smoking, move around more, and eat the carrot”

Components of Wellness



What is chiropractic “wellness” anyway?
How does it contribute to our national health goals?

Leading Health Indicators

Ten Major Public Health Issues

1. Physical activity
2. Overweight and obesity
3. Tobacco use
4. Substance abuse
5. Responsible sexual behavior
6. Mental health
7. Injury and violence
8. Environmental quality
9. Immunization
10. Access to health care

Health Determinants

KANSAS CITY EDITION WWW.KANSASCITY.COM FRIDAY, JUNE 12, 2009

THE KANSAS CITY STAR.

SPORTS DAILY

Zack Greinke has a strong outing, but the Royals lose to the Indians 4-3 in 10 innings. | B1

FYI AT THE MOVIES

in "The Taking of Pelham 1 2 3." Denzel Washington, right, guests with John Travolta. That movie is in 2-D, but more films, such as "Up," are coming out in 3-D — if you're willing to pay the price. | C1, C3

TODAY'S WEATHER: LOW 60, HIGH 78. MOSTLY CLOUDY WITH A SLIGHT CHANCE OF STORMS. | B14

75¢

BUSINESS

Some who lose jobs find landlords lenient

Area has complexes that discount rents, forgive fees for breaking leases or overlook credit woes.

By KEVIN COLLISON
The Kansas City Star

Jonathan Jacobson feared financial disaster last week when he called the management office of his apartment complex in Olathe.

The day before, he had lost his job as an account manager at Barrett-Sain Advertising. The bad news came only a few weeks after he had signed a one-year lease for a $1,000-plus-a-month apartment at the Avignon complex at 109th Street and Pflumm Road.

"I'm thinking, what am I going to do? It will break me in two months," Jacobson said. "Usually when you sign a lease there's not a lot of out clauses."

The answer floored him.

"They said Price Brothers (owner of the complex) has a program for people who lose their jobs that reduces their rent by half for three months," he said. "I was sweating it out, thinking, 'Holy crap, what will I do?' and it was a lifesaver."

At a time when layoffs are continuing unabated in the Kansas City area and the unemployment rate nears 8 percent, some renters are finding their landlords are more than sympathetic.

They're willing to discount rents, overlook credit problems or forgive penalties for breaking leases.

Douglas M. Price, president

SEE RENT | A10

79-17 SENATE VOTE | Ban on words 'light,' 'mild'

FDA TO OVERSEE BIG TOBACCO

Warning labels to get bigger. Agency could act to eliminate some of the 6,000 chemicals used in cigarettes.

FEATURES OF THE FAMILY SMOKING PREVENTION AND TOBACCO CONTROL ACT

LOCAL

Not all who 'signed' recall petitions did so

Sampling of papers finds some suspicious signatures — with three verified invalid.

By MICHAEL HARRIS and LYNN HORSLEY
The Kansas City Star

Vera Smith is among the 16,821 registered voters listed on pages and pages of certified petitions filed in support of the recall of Mayor Mark Funkhouser.

But Smith said she didn't sign the petition.

What's more, Smith, who resides on Kansas City's East Side, told The Kansas City Star on Thursday: "I don't support him being recalled."

Smith's name was listed with four other family members, and the signatures all appear the same.

A quick review by The Kansas City Star of the recall petition revealed some questionable signatures that were counted among those favoring the recall, and on Thursday afternoon the newspaper confirmed that at least three signatures counted by the election board were not valid.

But it's not clear whether there are enough bogus signatures to make a big difference in the recall count, which fell just 123 votes short of the 16,950 required to initiate a recall election.

Mayor Funkhouser's staff has a copy of the petitions and did notice "there might have been some irregularities," said Kendrick Blackwood, Funkhouser's chief of staff.

Blackwood also said "it's troubling" if the newspaper has confirmed that some signers either didn't actually sign or that they signed for someone else.

"We trust that the election officials will take that seriously," Blackwood said.

Anne McGuire, a key organizer of the recall petition effort, said the recall petitioners were a ragtag group that had no formal training in how to collect signatures. But the leaders attempted to send a clear message that they wanted everything done properly, including ensuring

SEE PETITIONS | A10

MORE LOCAL NEWS, A4

| Block & Co. takes over as lead developer for Citadel Plaza.

| Vice President Joe Biden talks stimulus in Overland Park.

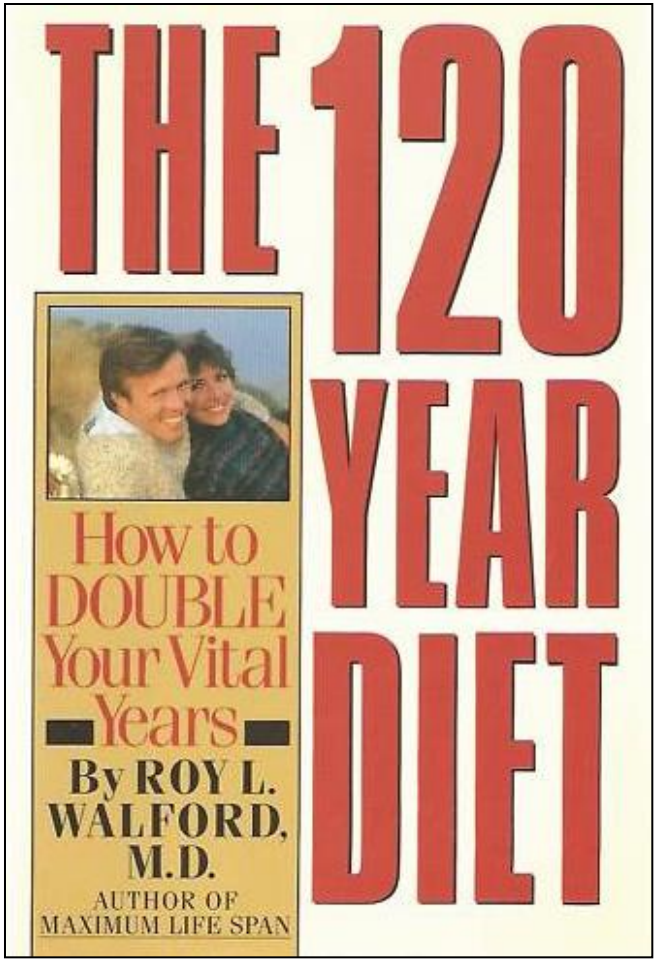
Storms brew over air traffic proposal

1. Behaviors
2. The environment and community in which we live
3. Public health policies and practices
4. Clinical care we receive (or fail to)

FDA will regulate tobacco for the first time including larger warnings, banning the word "light," and forcing the elimination of some chemicals from tobacco

Compression of Morbidity

- The reduction of sickness and disability so that a person enjoys more years of healthy life such that any sickness is postponed toward the end of the natural lifespan.



THE ROLLING STONES

Three things will dictate that you use prevention and you will have to implement them right away if chiropractic, as a profession will remain competitive

The Movement Toward Preventive Care

1. "Climate Change"
2. Consumer-driven "Wellness" market
3. Increasing <u>life expectancy</u> of Americans

Report Shows Americans Are "Living" Longer

1. “Climate Change”

- Not atmospheric climate change but “health care climate change”
- From President Obama:

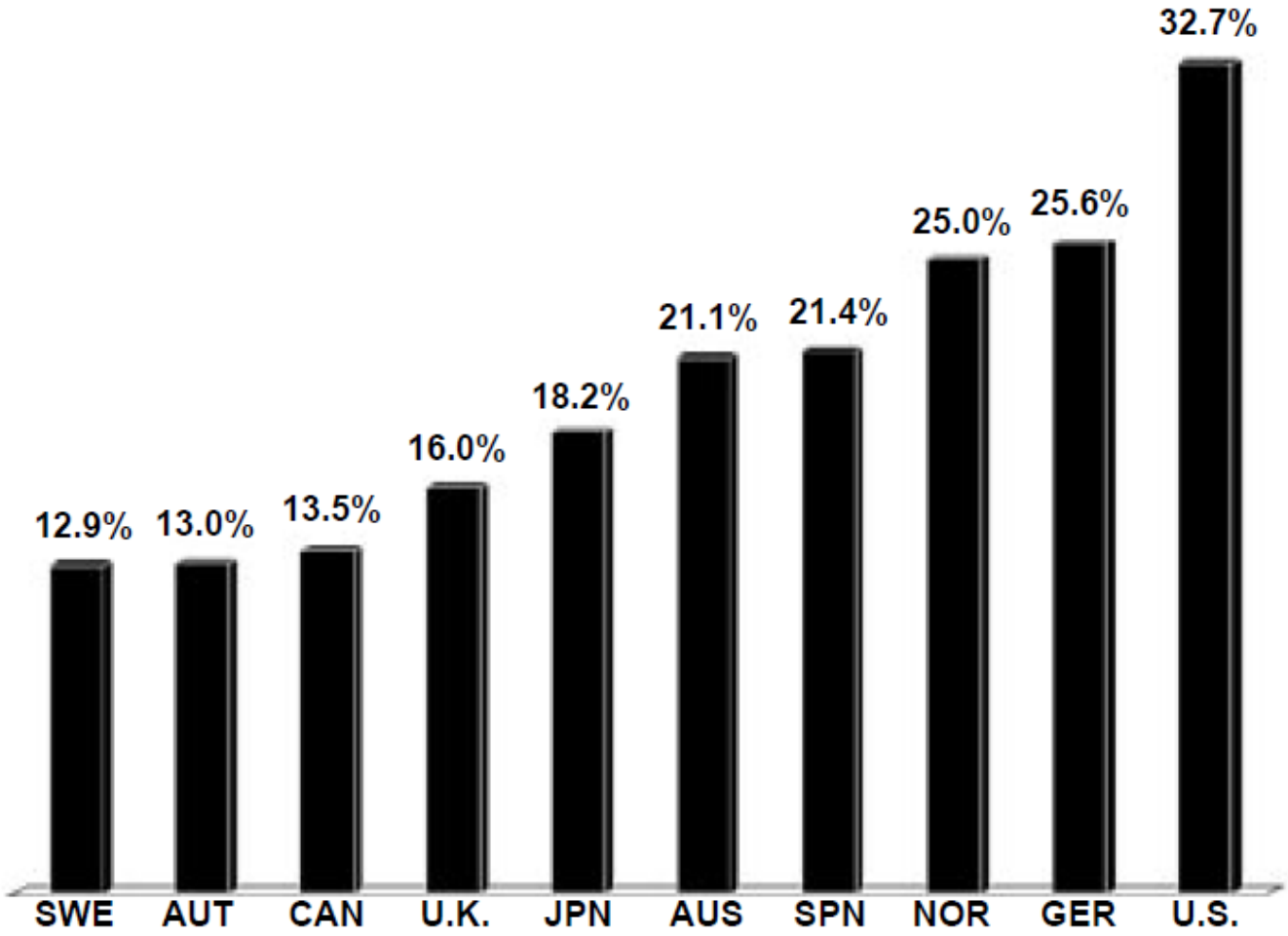
  “We simply cannot afford health CARE without a prevention component”

Will the Health Care System Go Broke?

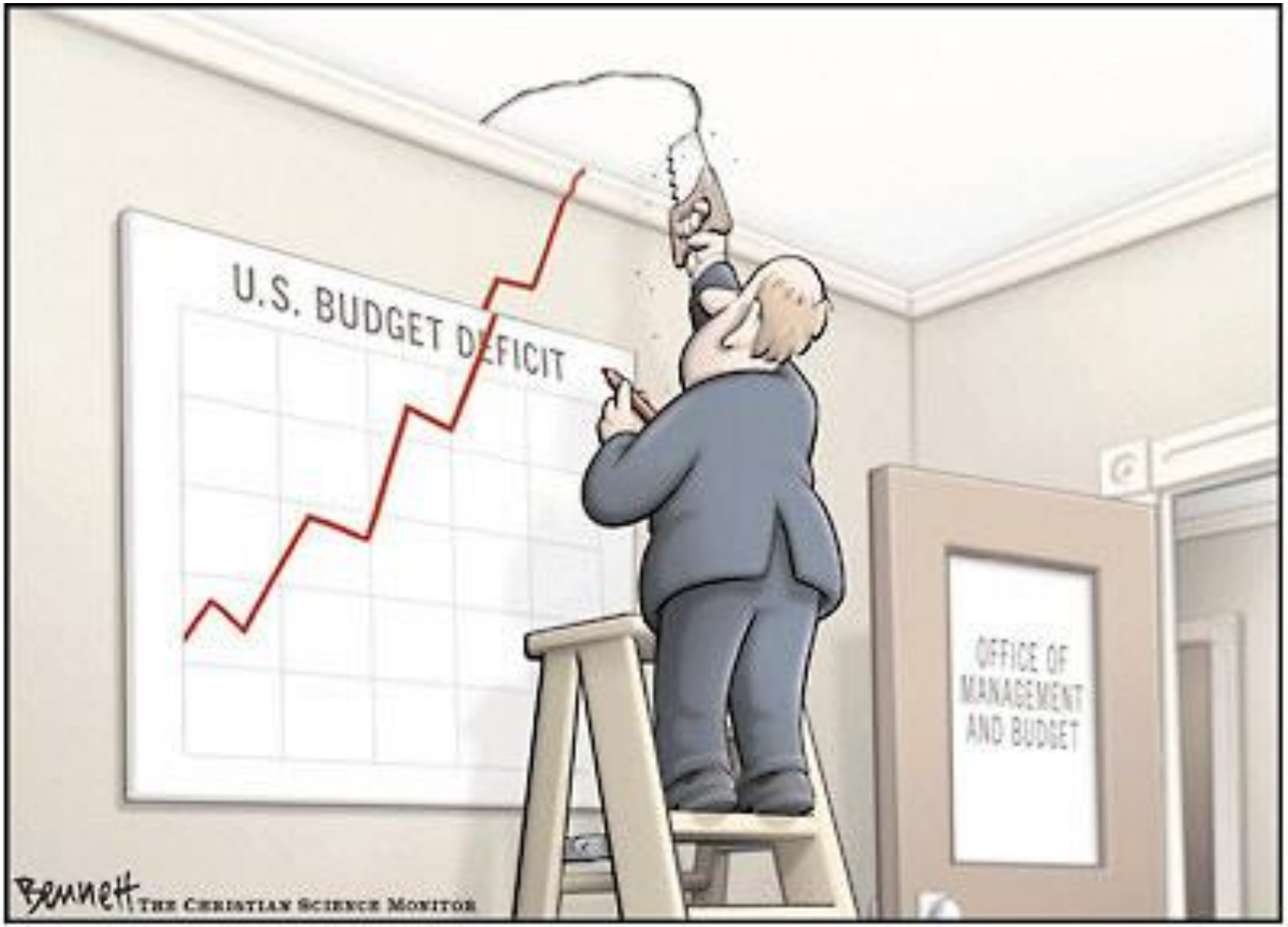
"By 2050, government health care spending will claim one-third of the U.S. economy if current trends continue."

http://www.ncpa.org/pdfs/st286.pdf

Government Health Care Spending as a Percent of Gross Domestic Product in 2050

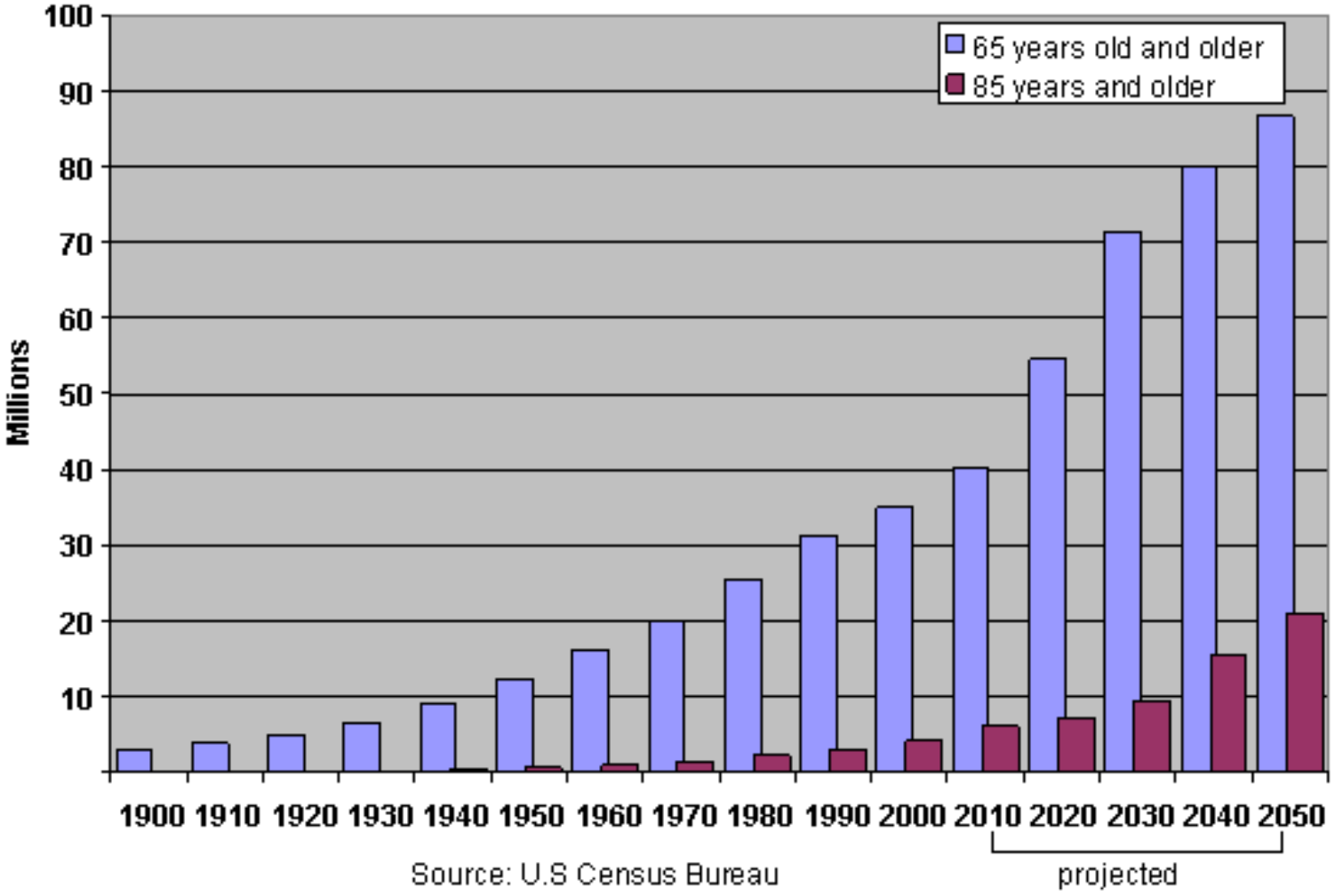


http://www.ncpa.org/pdfs/st286.pdf



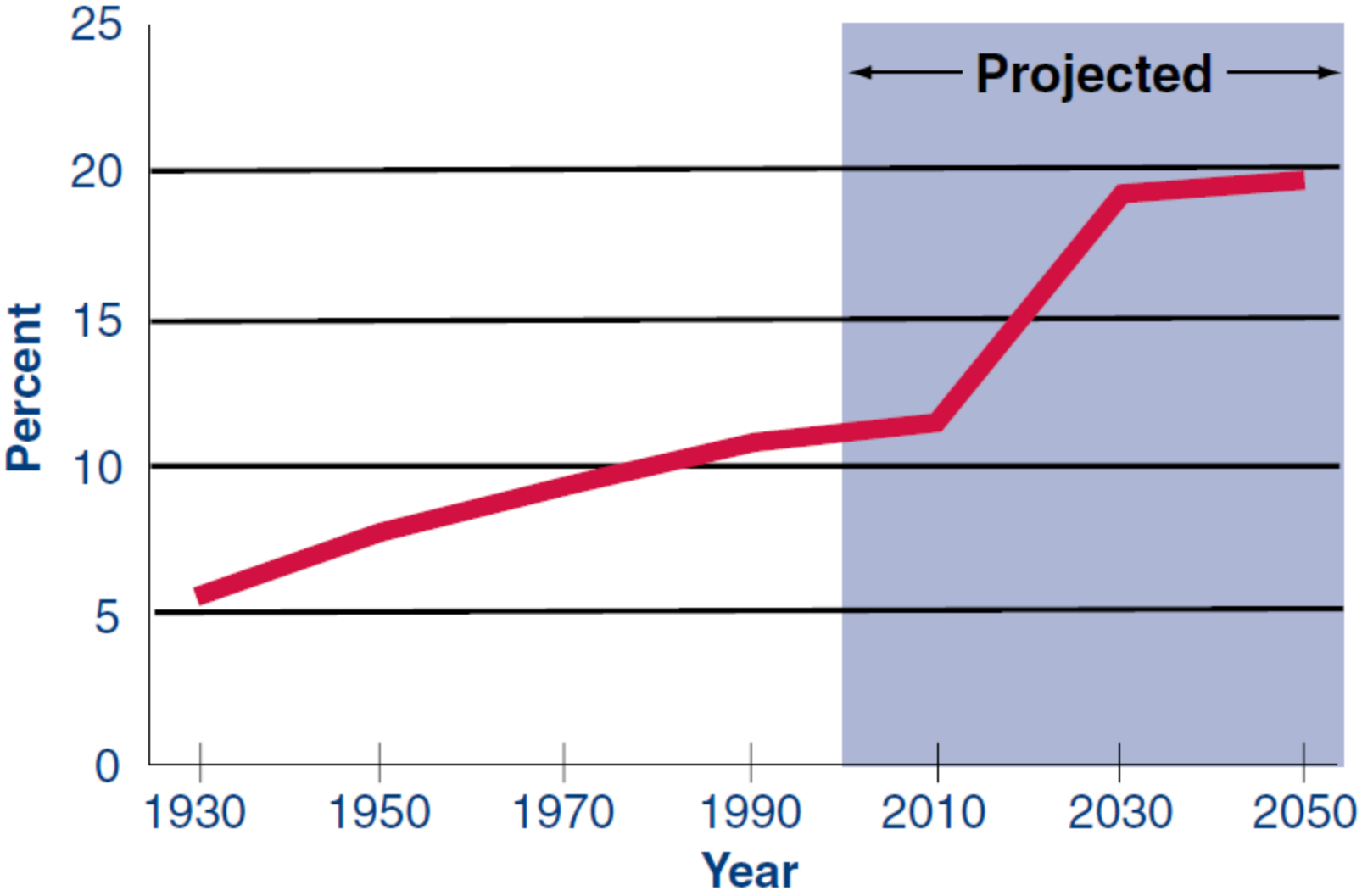
http://www.healthreformscam.com/wp-content/uploads/2010/03/deficit1.jpg

The Baby-Boomers are Aging



Number of Americans 65 years of age and older: 1900-2050

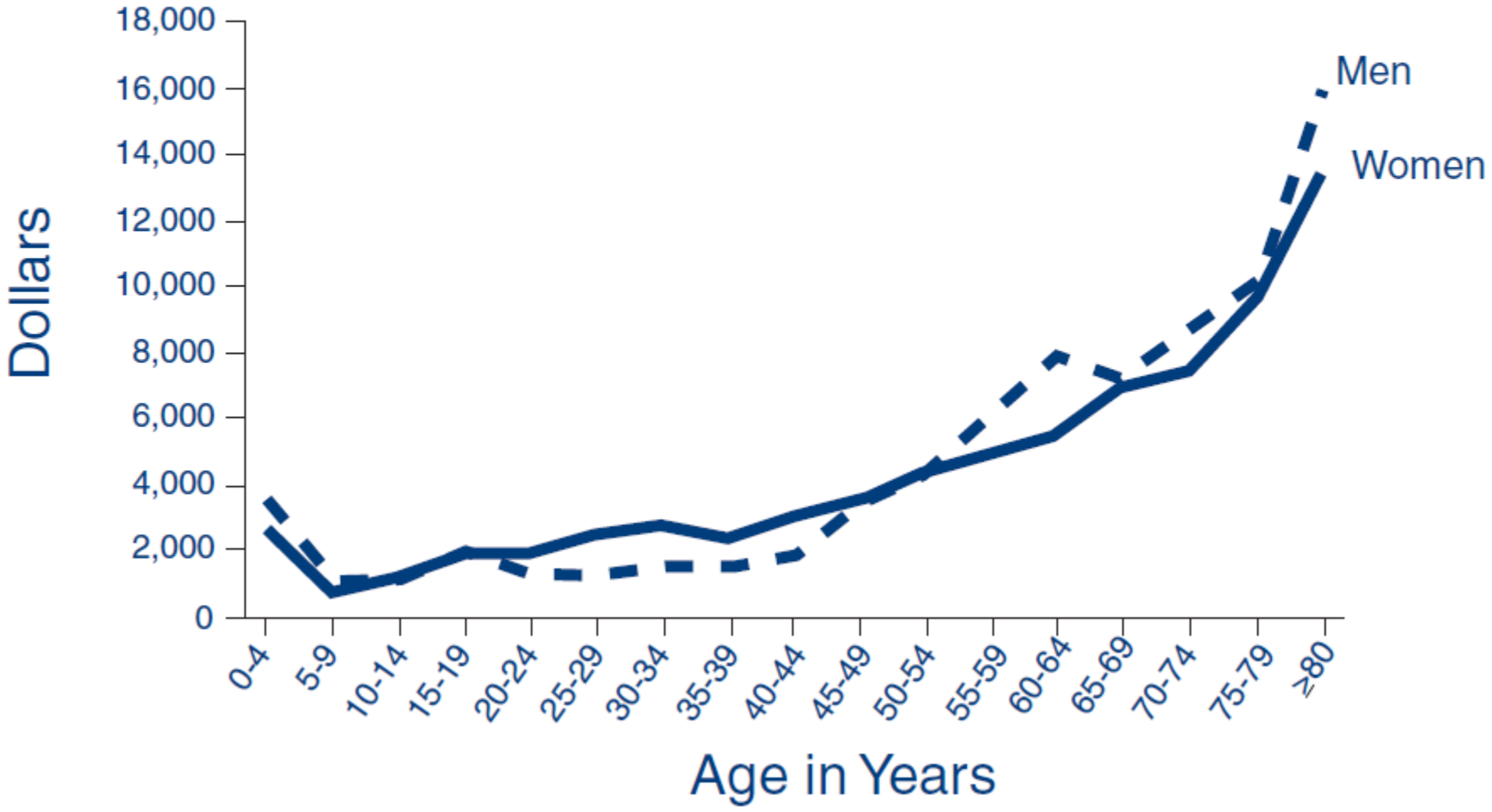
Figure 4. Percentage of U.S. Population Over 65 Years of Age



http://www.healthierus.gov/steps/summit/prevportfolio/Power_Of_Prevention.pdf

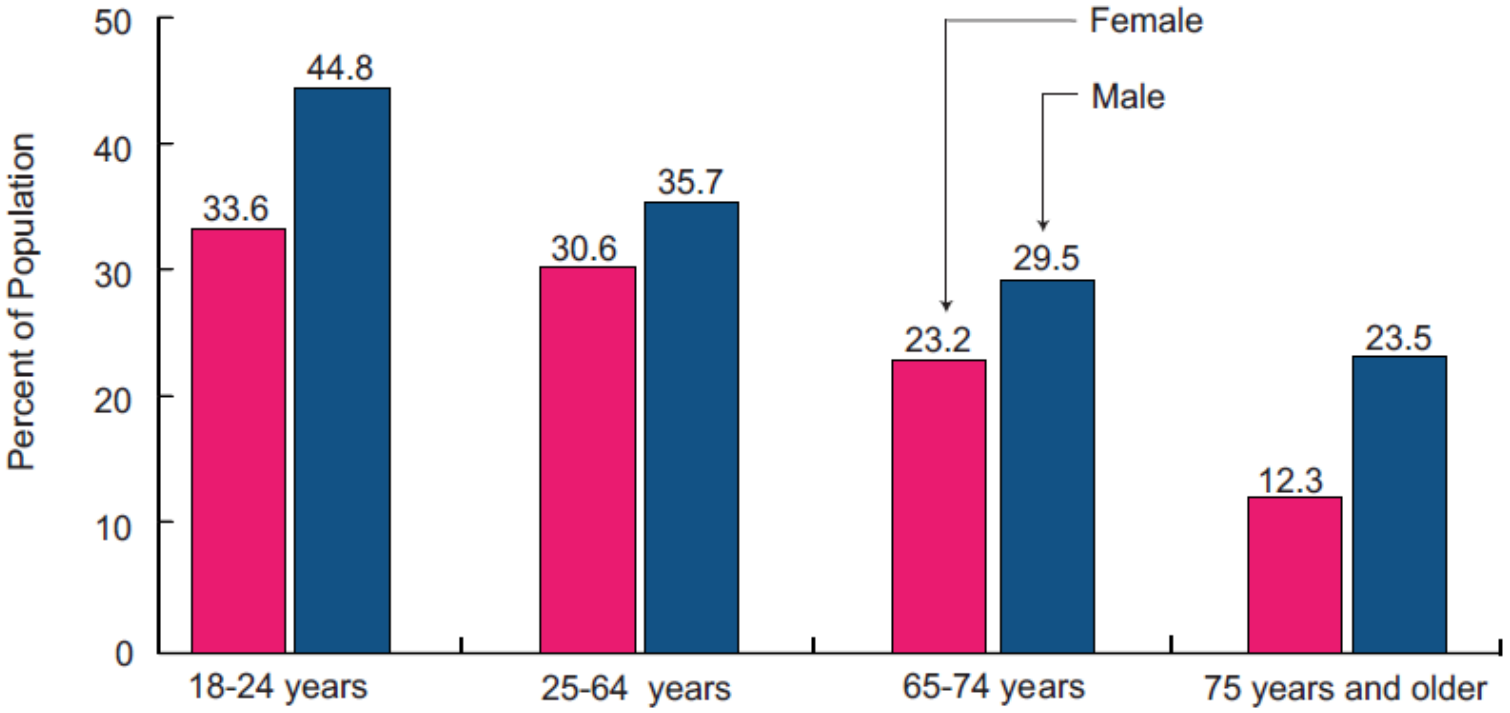
Does it matter that our Senior population is growing ever larger each year?

Figure 3. Estimated Per Capita Health Expenditures, by Age and Sex, 1995



http://www.healthierus.gov/steps/summit/prevportfolio/Power_Of_Prevention.pdf

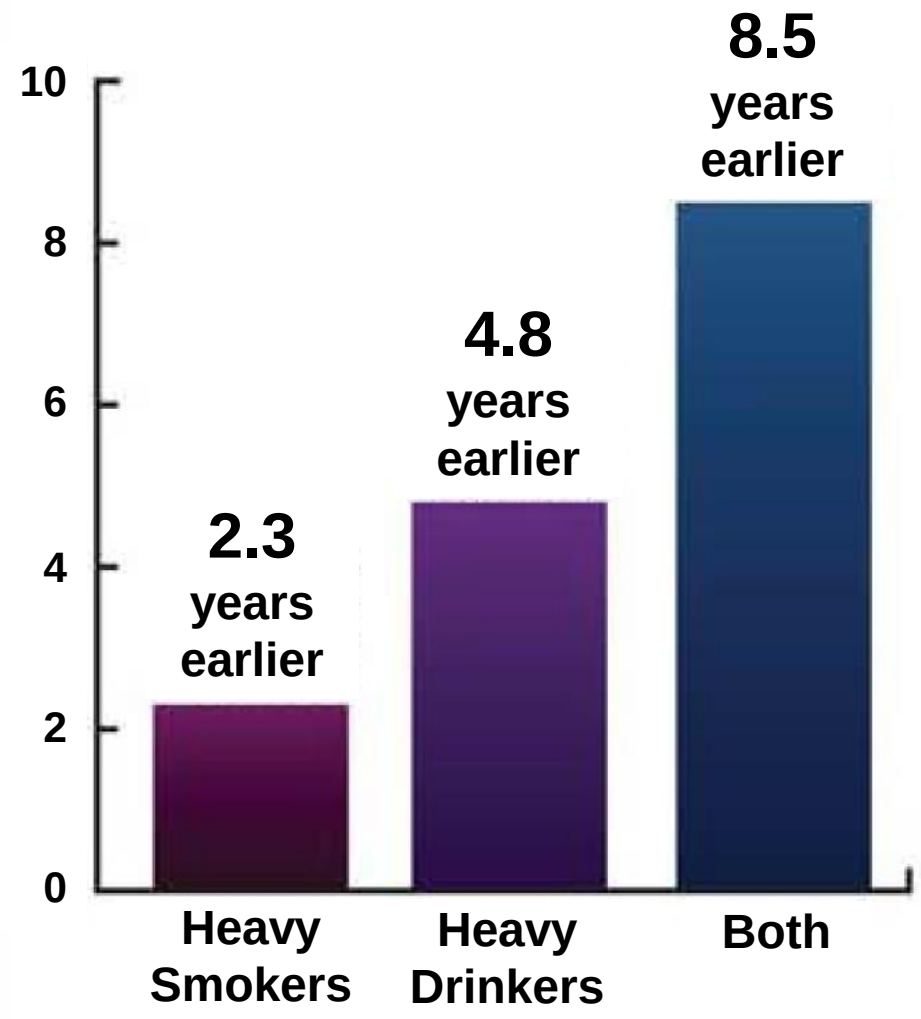
Regular Leisure-Time Physical Activity, 2002



**Regular leisure-time physical activity was defined as engaging in light-moderate leisure-time physical activity for greater than or equal to 30 minutes 5 or more times per week or engaging in vigorous leisure-time physical activity for greater than or equal to 20 minutes 3 or more times per week.*

ftp://ftp.hrsa.gov/mchb/whusa04.pdf

Effect of Multiple Lifestyle Factors

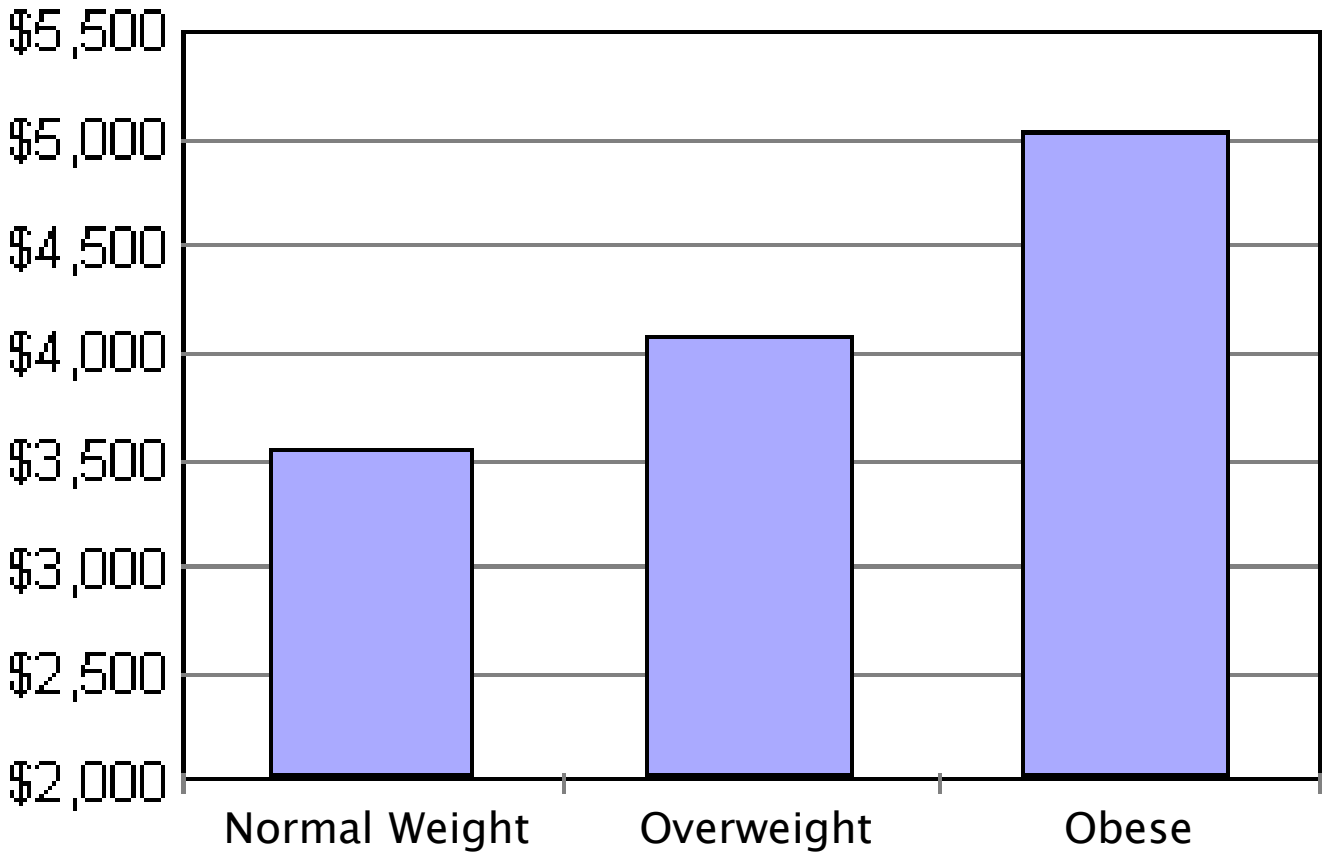


Onset of Alzheimer's compared to non-users

Heavy smoking (2 or more packs daily) and drinking (2 or more drinks daily) independently lead to early onset of Alzheimer's disease

SOURCE: Duara R *American Academy of Neurology* 60th Annual Meeting
https://www.aan.com/PressRoom/Home/PressRelease/594

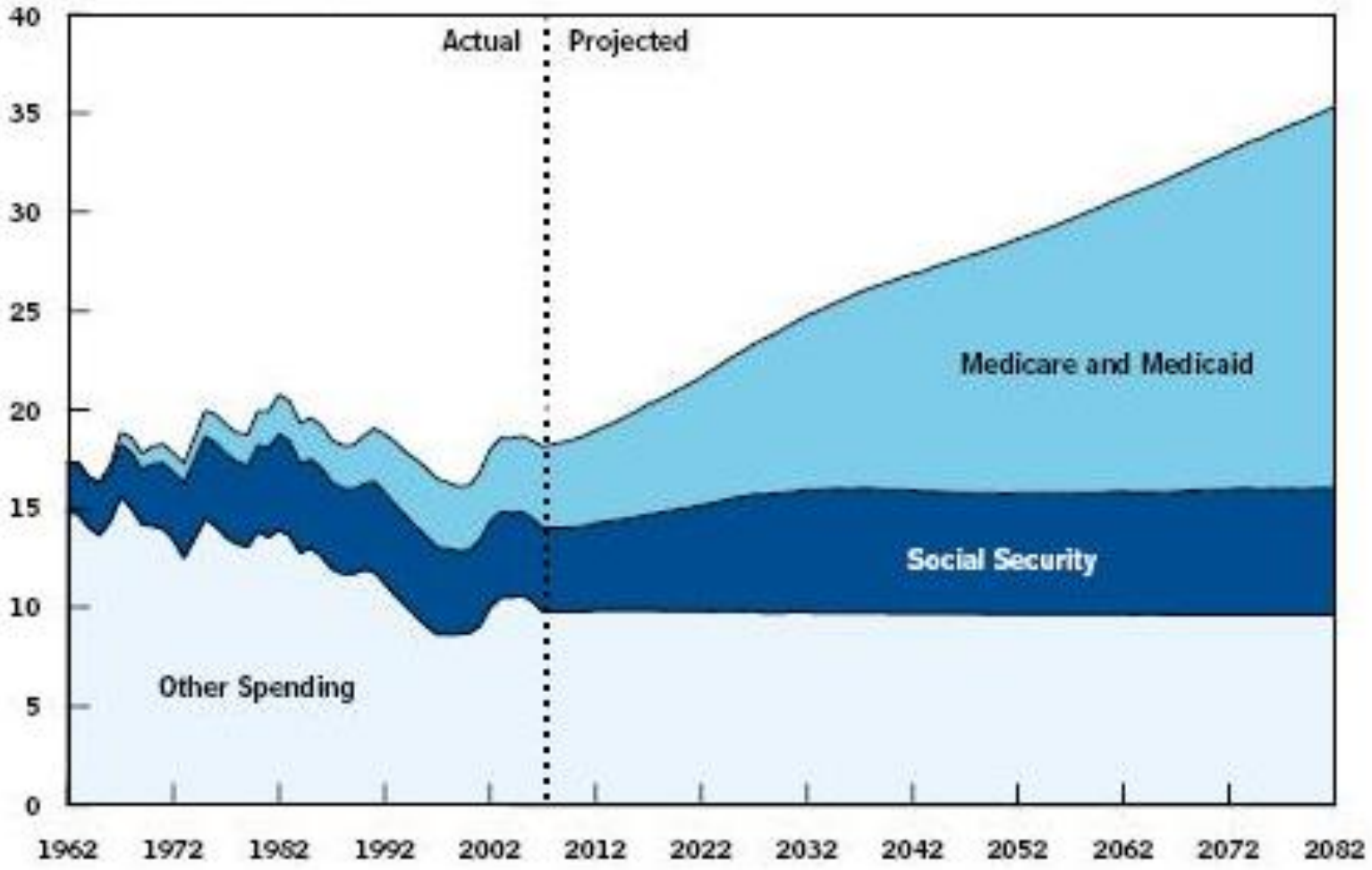
Per Capita Medicare Spending, 1996-1998



http://www.theblackdiabeticfoundation.com/learnmore.html

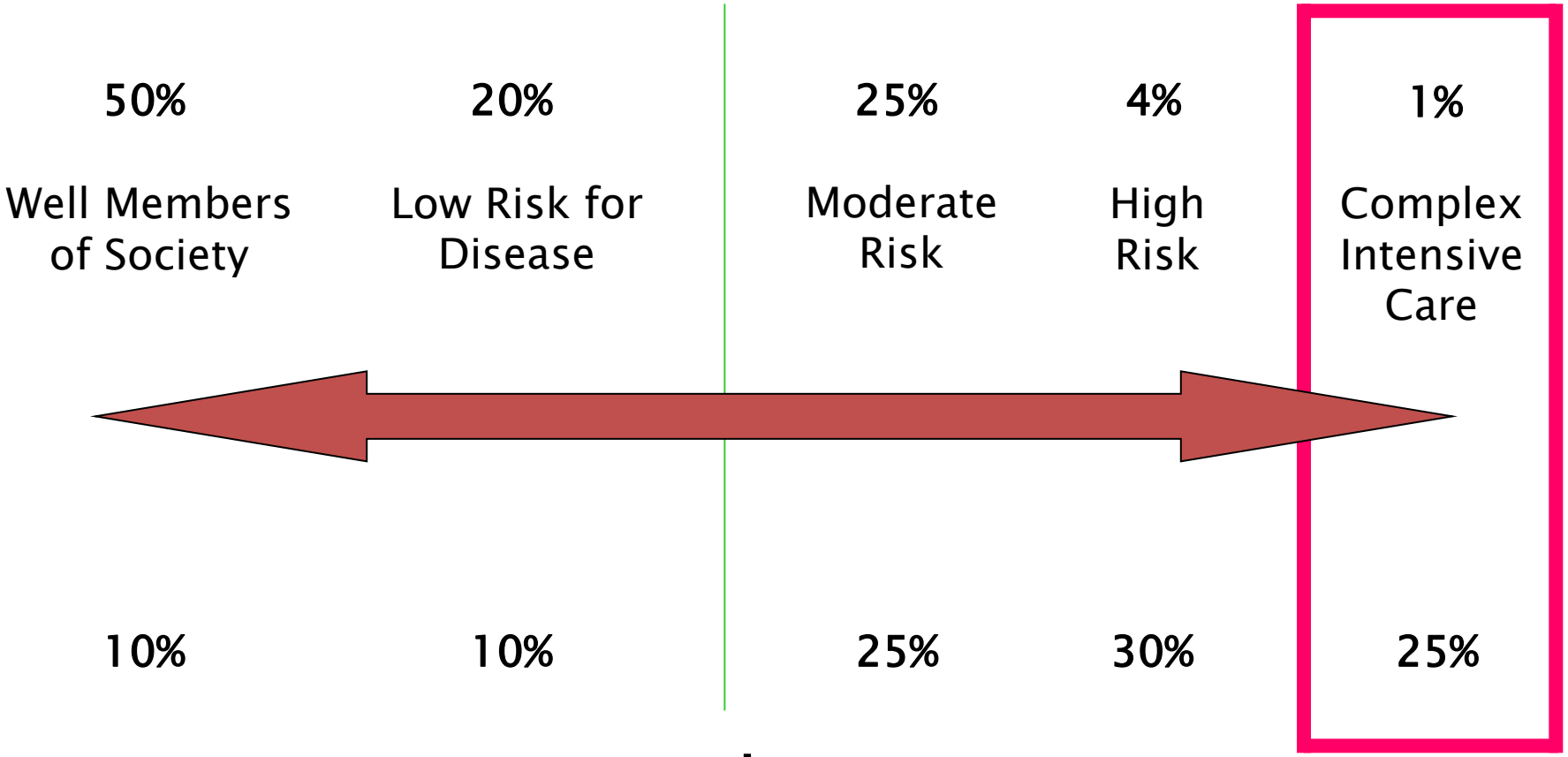
Projected Federal Spending Over the Long Term

% of GDP



http://taxation-business.com/justthefacts/2008_01_26_ss_medicare_cost_estimates.jpg

Percent of Population

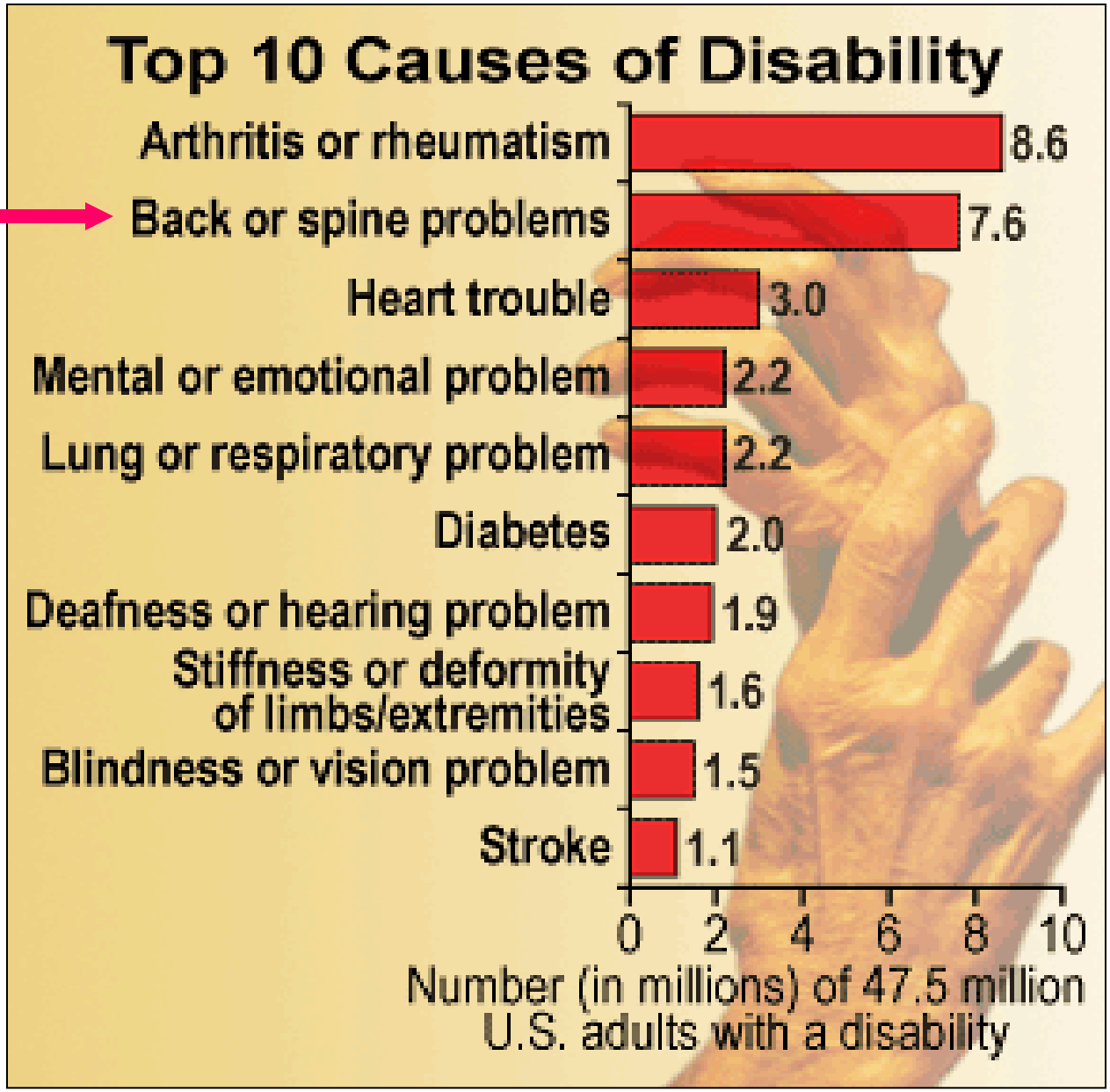


Expenditures

Health Care $pending

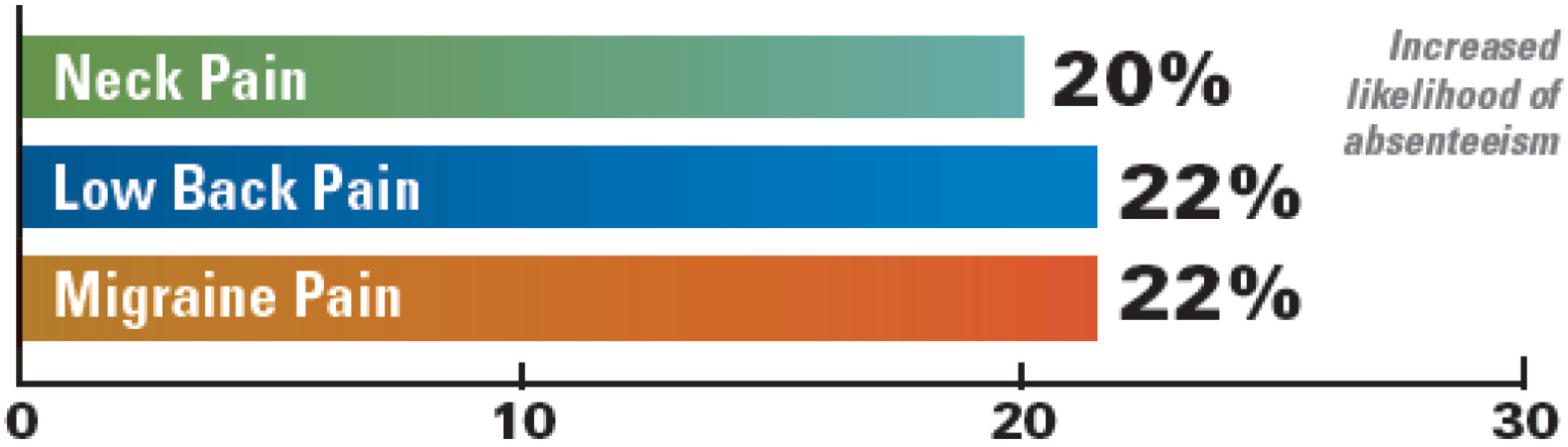
About **80%** of money spent is related to:

1. Smoking
2. Over consumption of alcohol
3. Bad dietary choices
4. Lack of physical activity
5. Stress-related disorders



http://www.cdc.gov/Features/dsAdultDisabilityCauses/

Causes of Disability



Spanish workers with chronic pain were more likely to be absent from work and to stay absent from work for longer. These associations are independent of sociodemographic characteristics, occupation, lifestyle, health status, and analgesics use.

The association of chronic neck pain, low back pain, and migraine with absenteeism due to health problems in Spanish workers
Spine 7-1-14 http://www.ncbi.nlm.nih.gov/pubmed/24825151

Prevention

- Our health care system may not survive as we know it now, but if it fails to add a greater focus on prevention, it will fail more quickly as the Baby Boomers tap the Medicare dollar
- If DC's fail to add prevention to what we do, we will likely be less valued, less likely to be reimbursed in the future, and left out of any planning that does involve preventive care

"Further improvements in the health of Americans can and will be achieved, not through increased medical care and greater expenditures, but through a renewed national commitment to efforts designed to prevent disease and promote health."

Healthy People, 1979

"Although immunization and screening tests remain important preventive services, the most promising role for prevention in current medical practice may lie in changing the personal health behaviors of patients long before clinical disease develops."

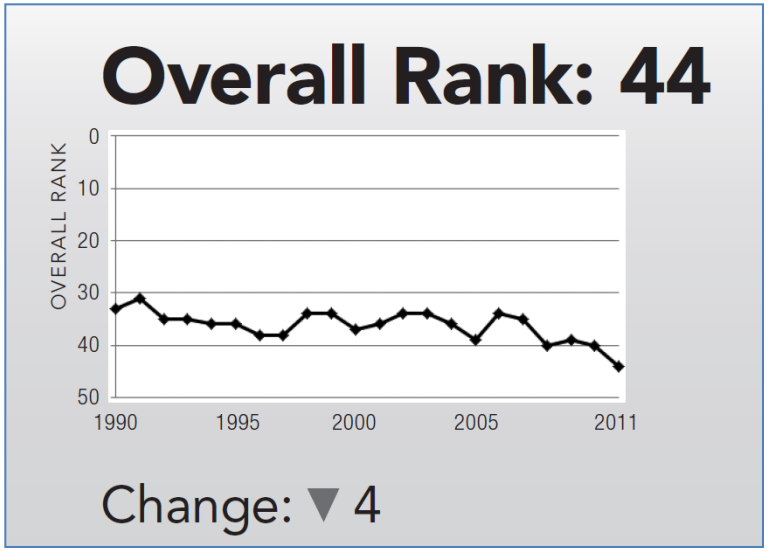
Guide to Clinical Preventive Services, 2nd ed. 1996

US Preventive Services Task Force

http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hscps2ed1996&part=A10514

State Specific Rankings—Texas

America's Health Rankings, 2011

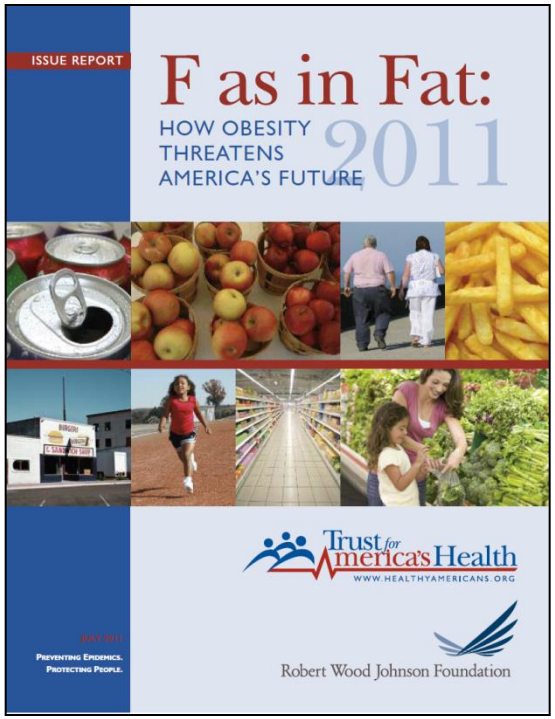


http://www.americashealthrankings.org/TX/2011

F as in Fat:

How Obesity Threatens America's Future, 2011

> 30% of Texans are obese

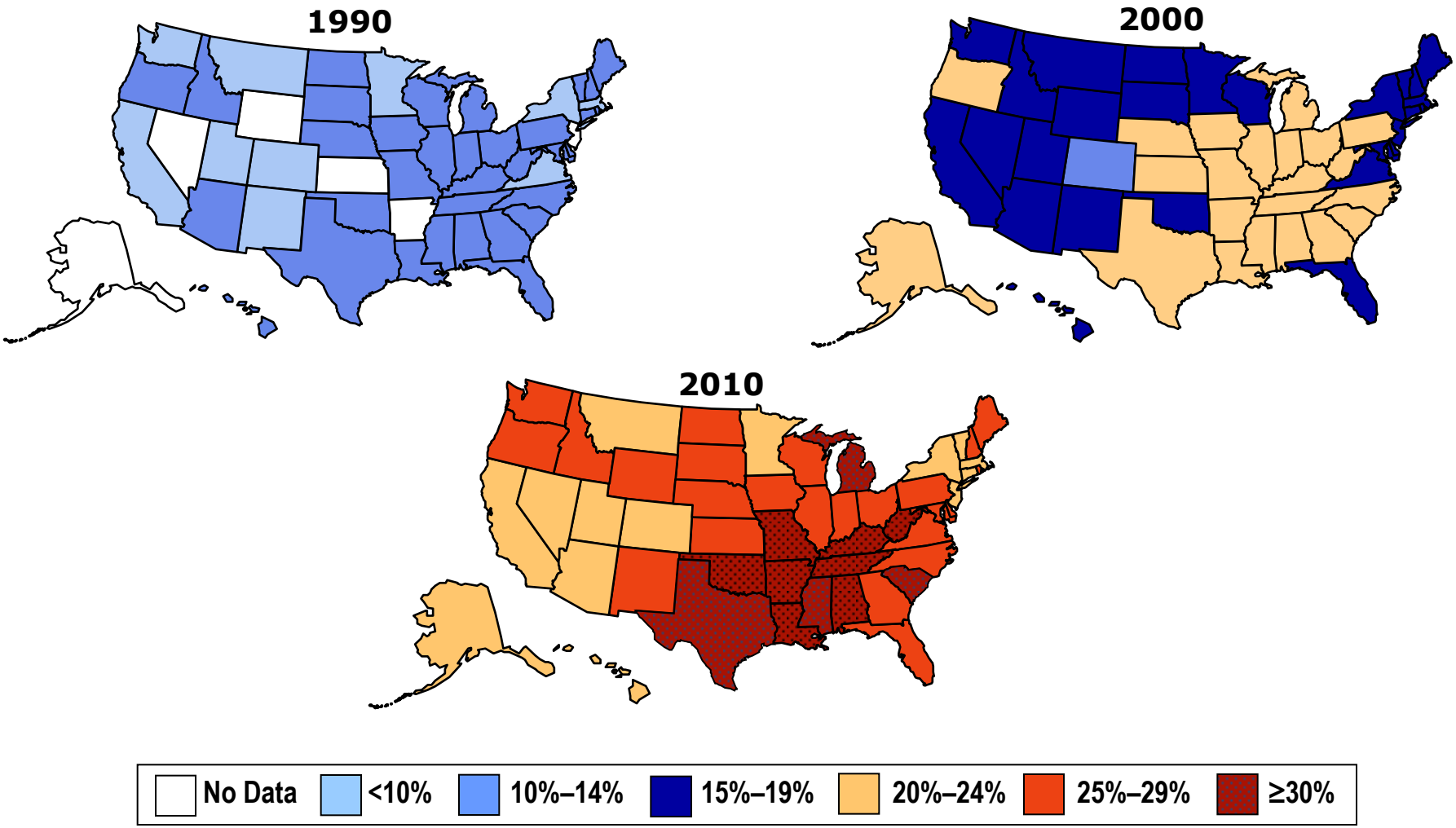


No state met the HP 2010 goal of 15%

http://healthyamericans.org/report/88/

Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010

(*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



http://www.cdc.gov/obesity/downloads/obesity_trends_2010.ppt

Americans are Delusional about Health Status

Disability and General Health Status among US Adults*

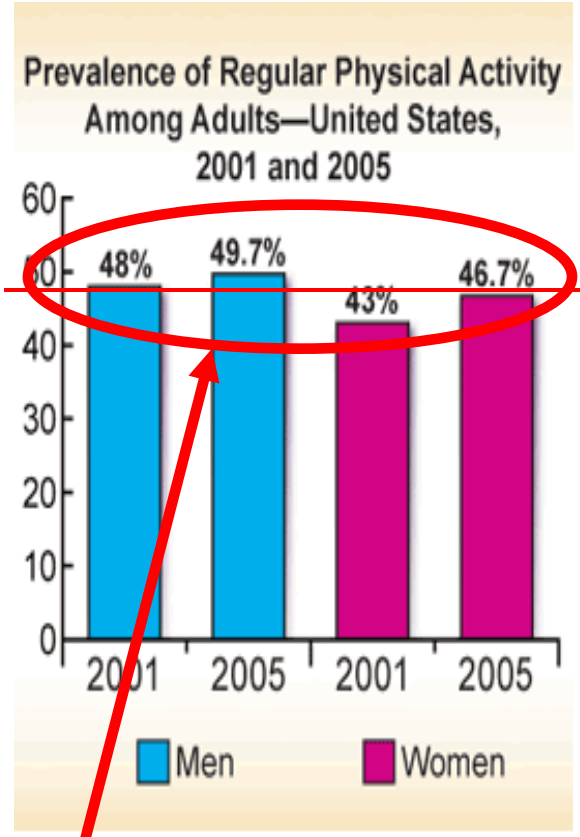
Health Status	Disability	No Disability
Excellent/ Very Good	27.2%	60.2%
Good	32.5%	29.9%
Fair/Poor	40.3%	9.9%

*Aged 18 years or older

Prevalence of Obesity^ Among US Adults, 2007*

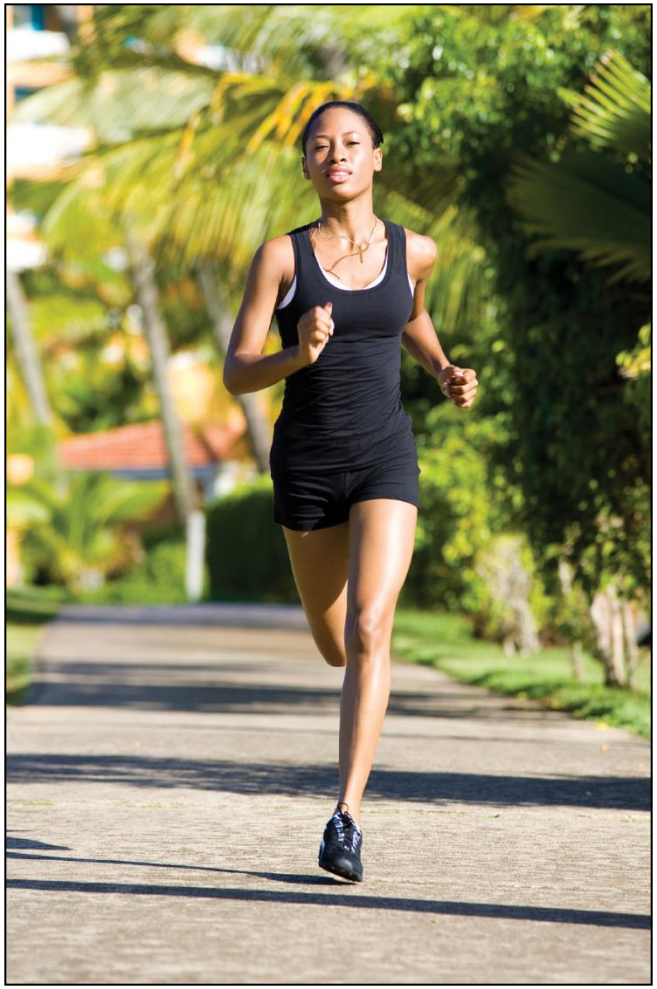
15%–19%	1 state
20%–24%	20 states
25%–29%	27 states
≥30%	3 states

^ Body Mass Index (BMI)≥30
*Includes District of Columbia



90% rate their General Health as "Excellent → Good", yet 50% get no regular physical activity, and only one state (Colorado) has less than 20% obesity!

2. Consumer-driven "Wellness" Market



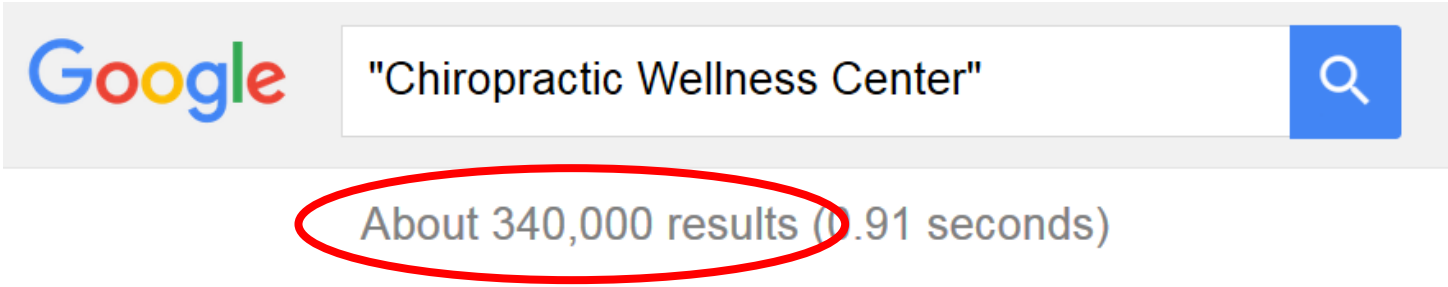
- Led by Baby-Boomers, Americans are seeking proven "wellness" methods that will keep them healthy, keep them playing and enjoying life, and that are COST-EFFECTIVE.

Most of the expenses in the multi-billion dollar "wellness revolution" are coming <u>OUT-OF POCKET</u>

"Consumer-Driven" = The patient is paying cash!

http://www.ncbi.nlm.nih.gov/pubmed/8418405

Bottom Line: If you advertise Wellness,



You need to deliver it!

Complementary and Alternative Medicine

- In 1997 there were 629 million visits to alternative medicine practitioners, which exceeded the total visits to all US primary care physicians.
- Total 1997 out-of-pocket expenditures relating to alternative therapies were conservatively estimated at $27.0 billion, which is comparable with the projected 1997 out-of-pocket expenditures for all US physician services.

JAMA. 1998 Nov 11;280(18):1569-75. http://www.ncbi.nlm.nih.gov/pubmed/9820257

2004 National Health Interview Data

- More than 1/3 of U.S. adults use CAM
- However, only 12% from a licensed provider
- Most expenditures are out of pocket
- Women > men
- Higher educated > lower educated
- Former smokers more likely to use CAM
- Recently hospitalized more likely to use CAM

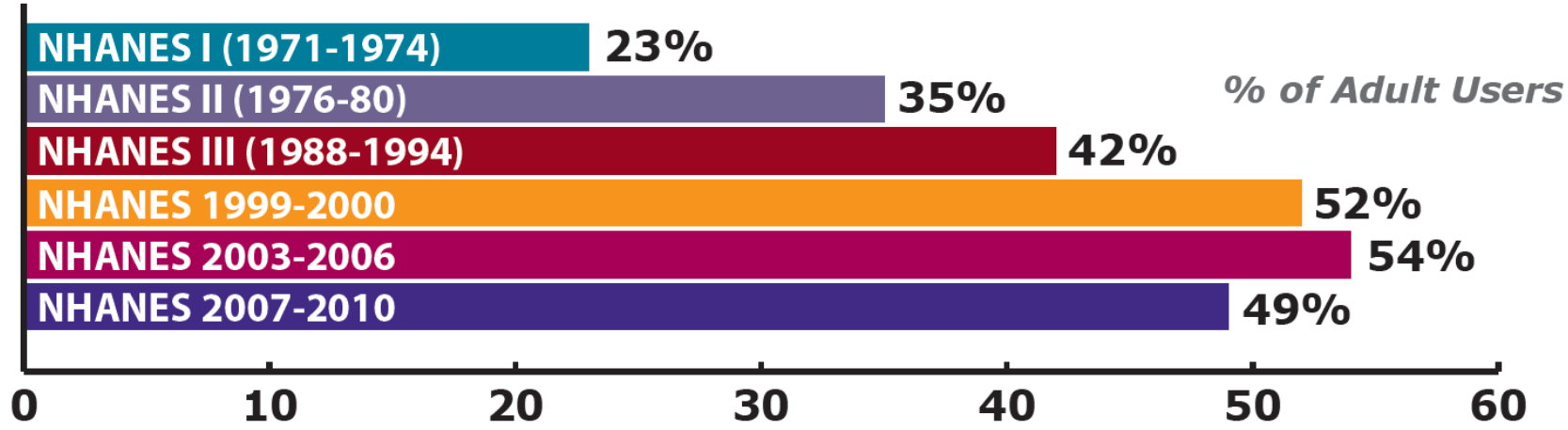
www.cdc.gov/nchs/data/ad/ad343.pdf

Complementary and Alternative Medicine

- 43% – Prayer for own health
- 24% – Prayer for others health
- 19% – "Natural products"
- 12% – Deep breathing
- 8% – Meditation
- 8% – **Chiropractic**
- 5% – Yoga
- 5% – Massage
- 4% – Diet-based therapies

www.cdc.gov/nchs/data/ad/ad343.pdf

Trends in Supplement Use



*National Health Nutrition and Examination Surveys

Overall, the evidence suggests that users of dietary supplements are seeking wellness and are consciously adopting a variety of lifestyle habits that they consider to contribute to healthy living.

Health habits and other characteristics of dietary supplement users: a review
Nutr J 2-6-14 http://www.ncbi.nlm.nih.gov/pubmed/24499096

Reasons for using CAM

55% Believed CAM combined with conventional medical care would help

50% Thought it would be “interesting to try”

26% Because a conventional medical professional suggested they try it

28% Felt conventional medical treatment would not help them

13% Conventional care was too expensive

www.cdc.gov/nchs/data/ad/ad343.pdf

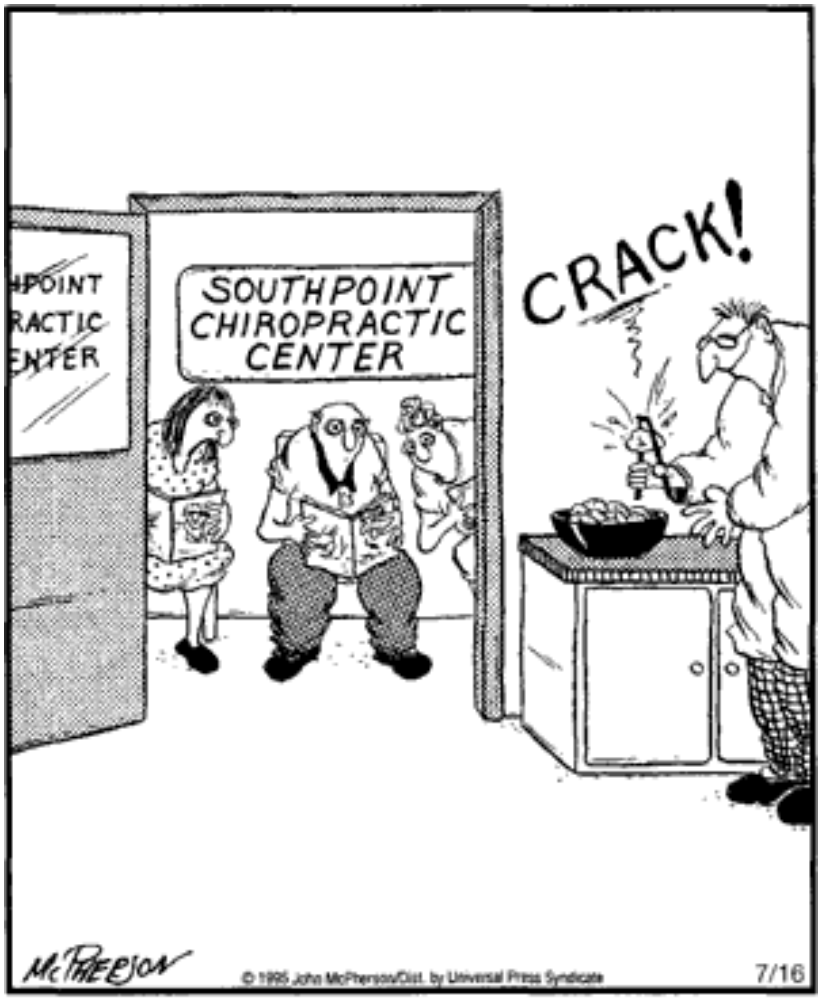
Bottom Line

- A minority (28%) use CAM because they see it as an **alternative to** medical care.
- Therefore, we must learn to be a part of the health care team.

www.cdc.gov/nchs/data/ad/ad343.pdf

CAM and Older Americans

- 88% of Americans over 65 use CAM!
- 65% used Dietary supplements
- 46% used Chiropractic



Gerontologist. 2005 Aug;45(4):516-24. http://www.ncbi.nlm.nih.gov/pubmed/16051914

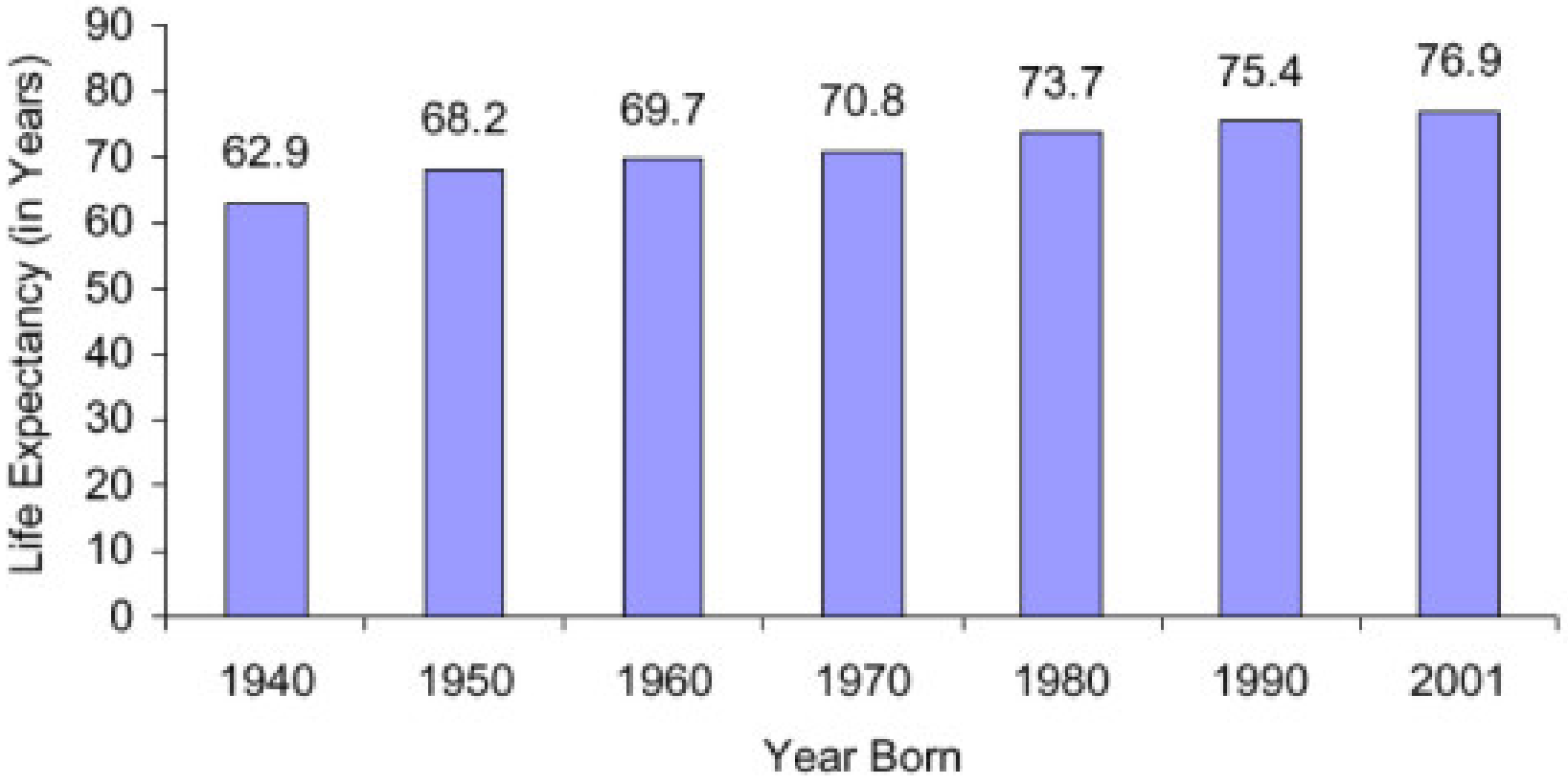
3. Increasing Life Expectancy

- Average life expectancy of Americans is 77.9 years (and increasing)

- Male = 75
- Female = 80

"High blood pressure, high cholesterol, high blood sugar, high anxiety… getting high is no fun at my age!"

Americans' Life Expectancy Is Increasing



Source: National Center for Health Statistics

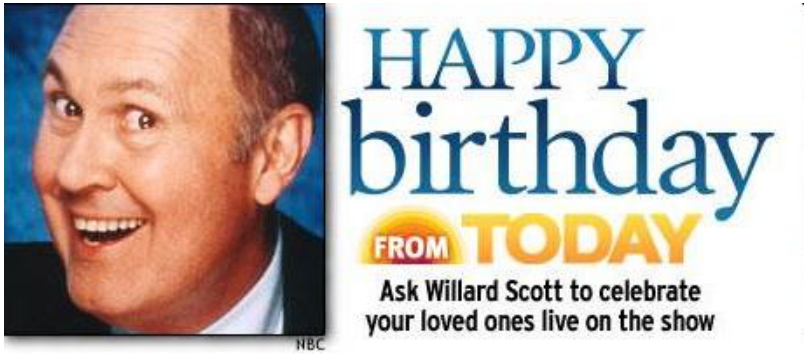
Broken Limits to Life Expectancy

- "Despite a wide-spread belief that old-age mortality is intractable, life-expectancy is NOT approaching a limit. Rather, the evidence suggests that aging is plastic and that survival can be extended by various genetic changes and non-genetic interactions."
- "A reasonable scenario would be that life expectancy will continue to rise in the coming decades, fuelled by advances in the prevention, diagnosis, and treatment of age-related diseases."

http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

What You May Not Know

- "Since 1950 the number of people celebrating their 100th birthday has at least doubled each decade."



http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

More on Aging

- There is a striking number of centenarians in developed countries
- This number is increasing by about 8% per year in developed countries
- In these countries the number of people celebrating their 100 birthday doubled each decade between 1950 and 1980 but by the end of the last century that rate was up to 2.4 per decade

http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

More on Aging

- Life Span refers to the maximum number of years reached by individuals within a group. While individuals have lived to 120 years, maximum life-span is normally distributed with a mean of 85 years and a standard deviation of 7 years.
- Life Expectancy refers to the average life span. With decreased deaths due to infectious disease, this number has been steadily increasing and shows no sign of leveling off.

http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

Final Words on Aging?

- Even the population of super-centenarians is increasing rapidly (>110 yrs old)
- This is due to a decline in mortality AFTER 80 years of age. This factor has been 2-3 times more important than any other factor
  - e.g. Increases in mortality rates SLOW after age 80! (survival of the fittest?)

http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

Bottom Line from Vaupel and Kistowski

- "These results support the repeated finding that age-specific death rates for humans are strongly influenced by current conditions AND BEHAVIOR."
- "Studies on twins indicate that only 25% of the variation in life-span can be attributed to genetic differences"

Nature vs. Nurture (epigenetics)

These two ‘agouti’ mice are genetically identical. The mother of the mouse on the right was supplemented with B12, folic acid and choline.

http://www.precisionnutrition.com/epigenetics-feast-famine-and-fatness

Down-side

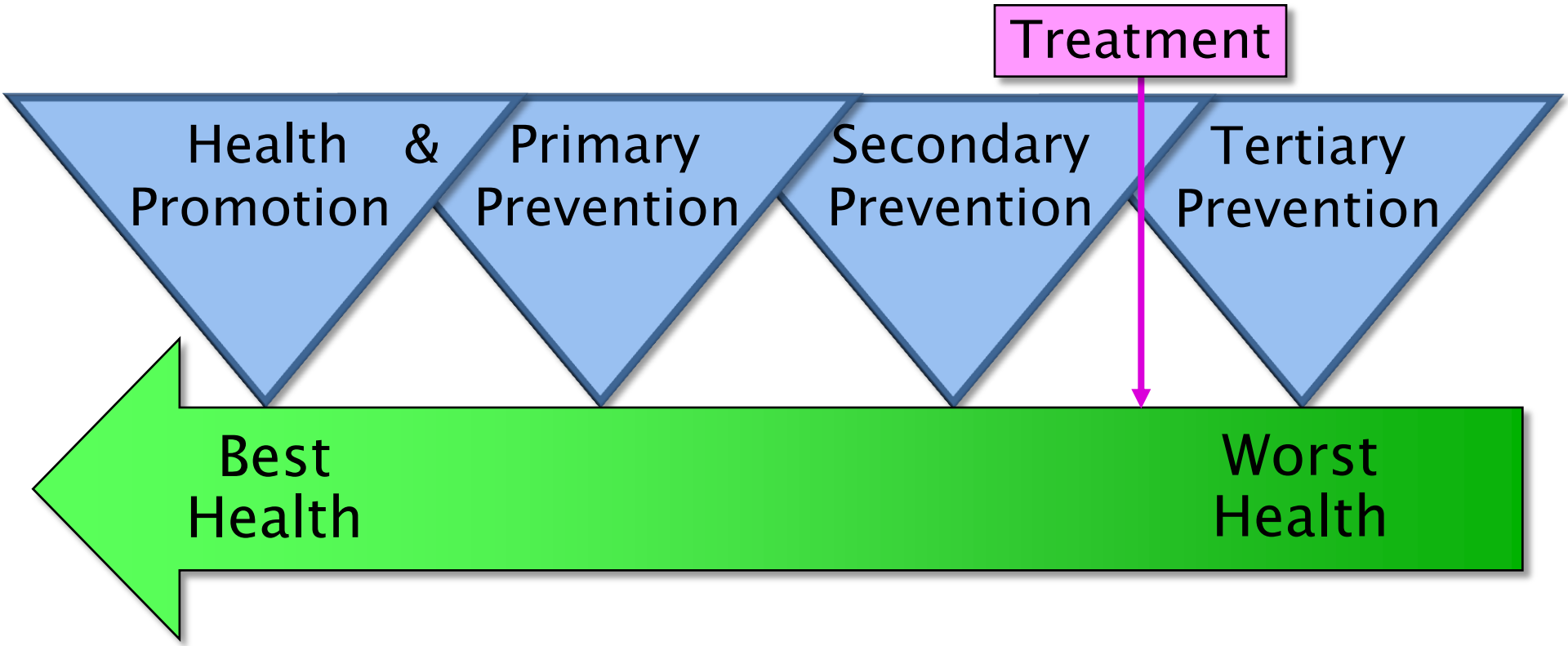
- "Rising longevity will pose major challenges to health care and social security systems."
- "The rising number of retirees represents a ticking time bomb placed right in the inner nucleus of the social security system – there will be more and more people receiving transfer payments for longer and longer periods of time."

http://www.ageing.ox.ac.uk/system/files/AH%203%20Vaupel%20and%20v_Kistowski.pdf

So—What must we do now?

- To remain competitive we must emphasize true health promotion and **primary prevention** with our patients and stop advocating things that have no merit in the promotion of health and stop advertising we are “wellness doctors” if we really are not.

The Continuum of Health



Susceptibility	Presymptomatic disease	Clinical manifestation	Disability
• risk factors • no signs / symptoms	• signs • no symptoms	• signs • symptoms	

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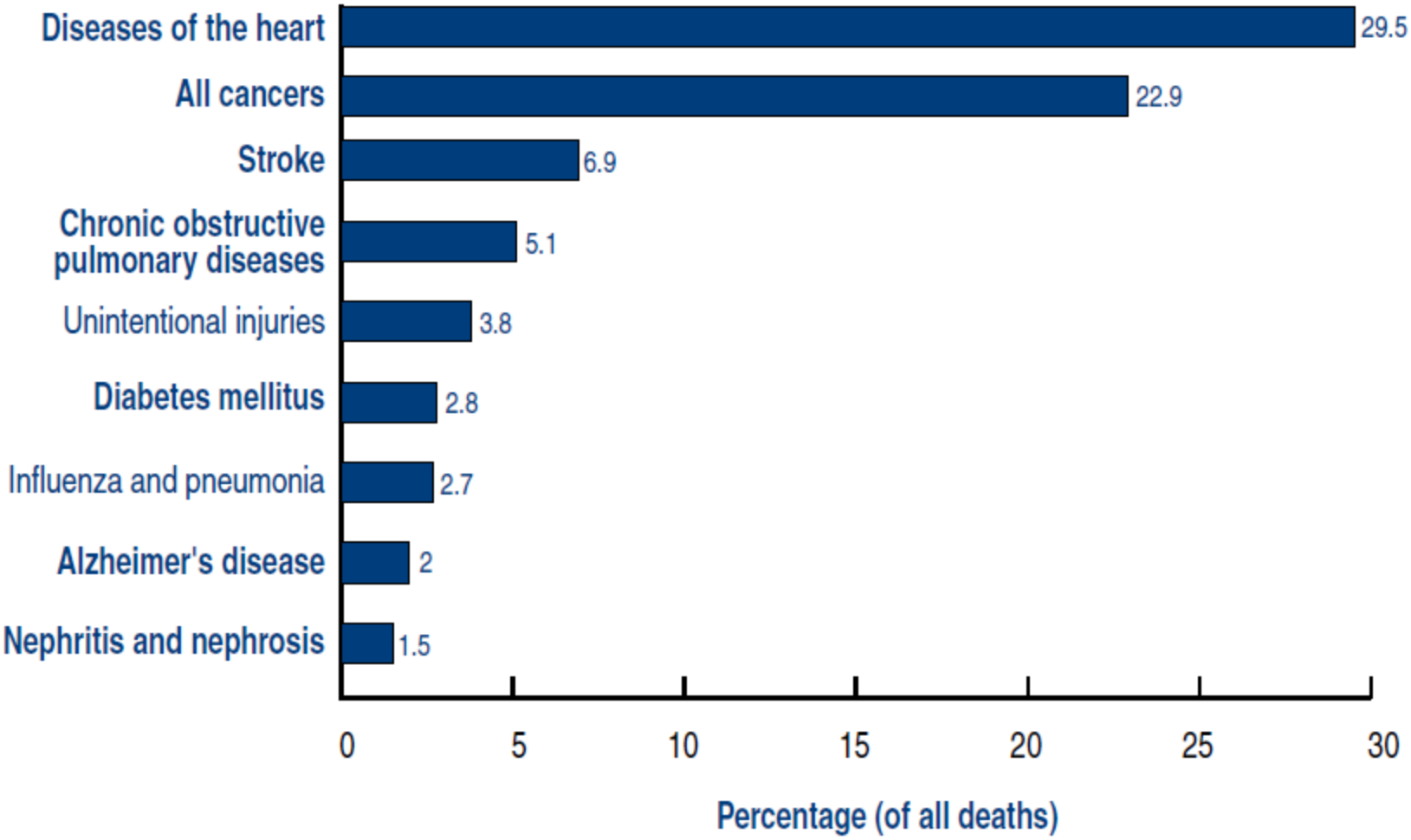
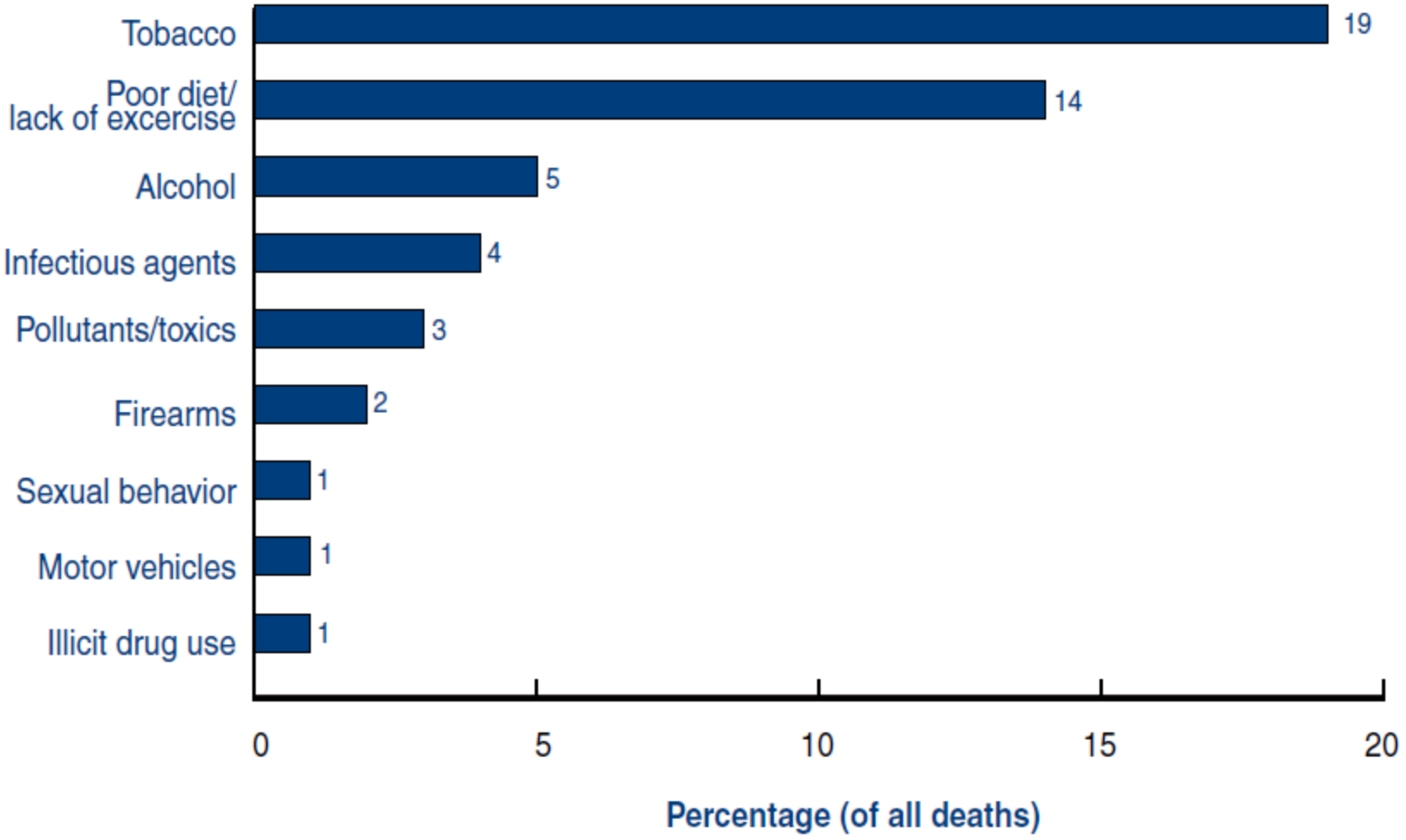
Figure 1. Most Common Causes of Death, United States, 2000



http://www.healthierus.gov/steps/summit/prevportfolio/Power_Of_Prevention.pdf

Figure 2. Actual Causes of Death, United States, 1990



http://www.healthierus.gov/steps/summit/prevportfolio/Power_Of_Prevention.pdf

Errors in Health Care: A Leading Cause of Death and Injury

- 12,000 deaths/year from unnecessary surgery
- 7,000 deaths/year from medication errors in hospitals
- 20,000 deaths/year from other errors in hospitals
- 80,000 deaths/year from nosocomial infections in hospitals
- 106,000 deaths/year from non-error, adverse effects of medications

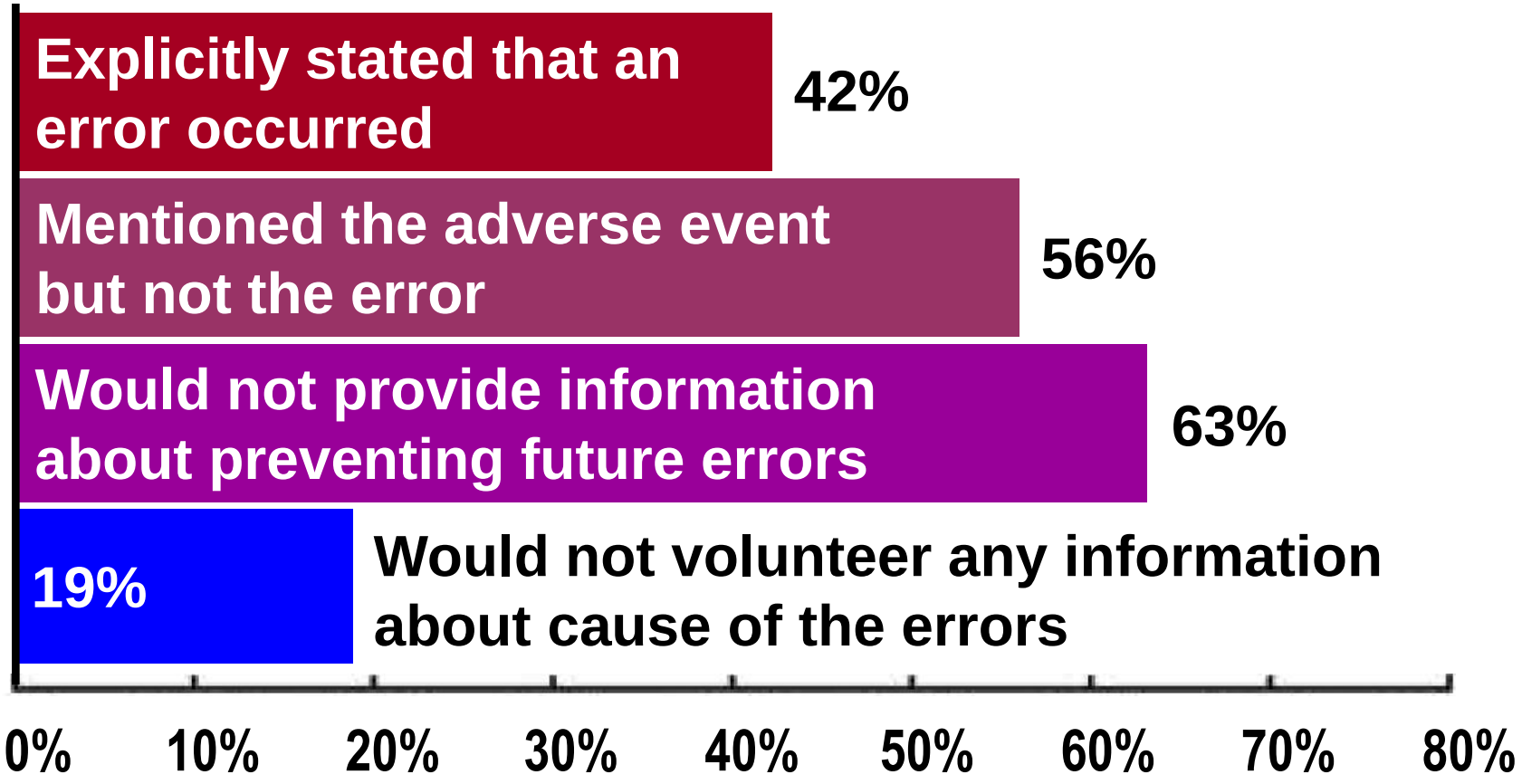
http://books.nap.edu/openbook.php?record_id=9728&page=26

Bottom Line

- Total – 225,000 deaths per year from iatrogenic causes.
- Most of the data → hospitalized patients.
- Estimates are for deaths only and do not include adverse effects that are associated with disability or discomfort.
- Estimates of death due to error are lower than those in the IOM report.
- If the higher estimates are used, the deaths due to iatrogenic causes would range from 230,000 to 284,000. In any case, 225,000 deaths per year constitutes the **third leading cause of death in the United States**, after deaths from heart disease and cancer.

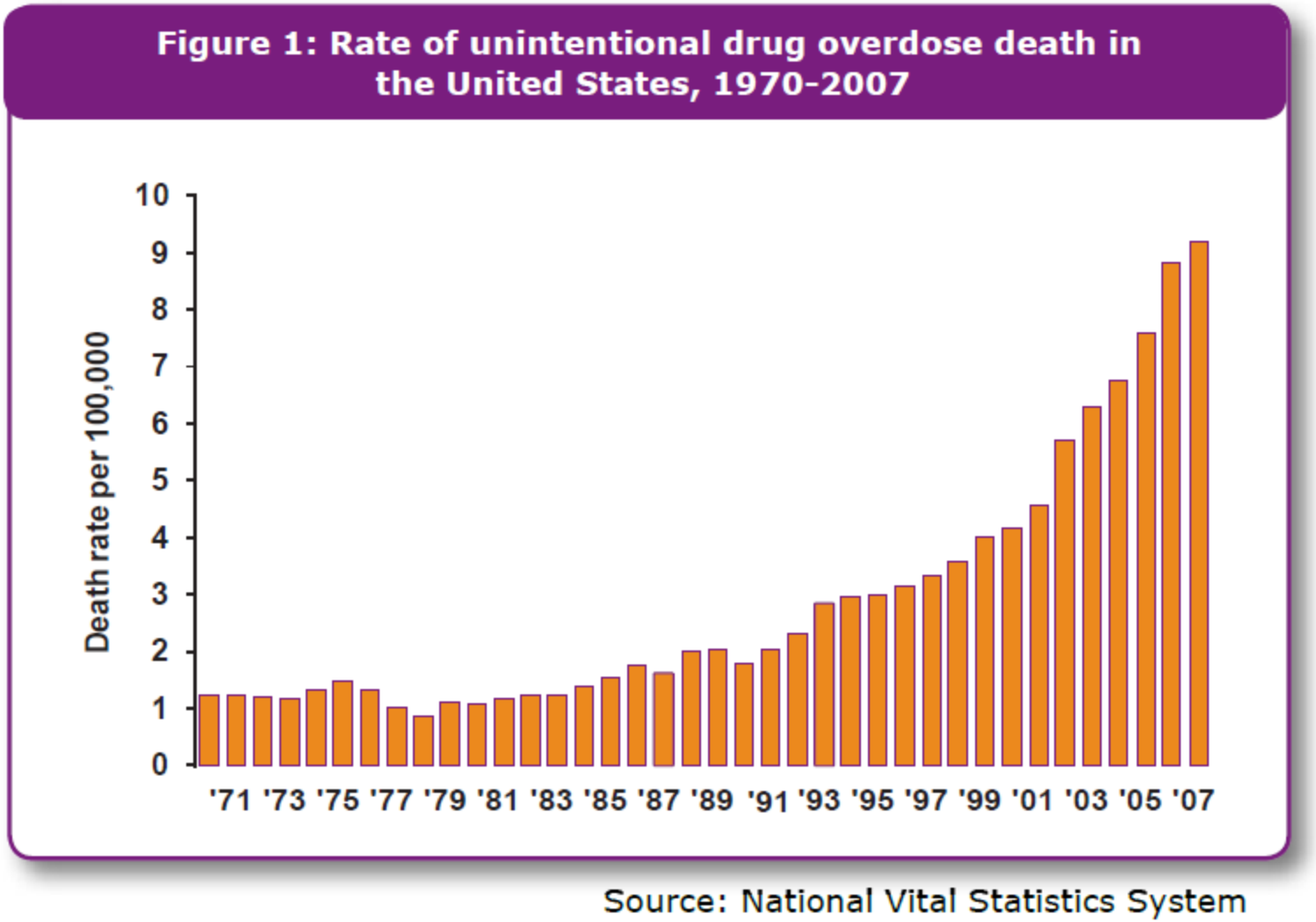
Is US health really the best in the world?
JAMA. 2000 Jul 26;284(4):483-5. http://www.ncbi.nlm.nih.gov/pubmed/10904513

Disclosure of Medical Errors



Choosing your words carefully: how physicians would disclose harmful medical errors to patients. Arch Int Med 8-14-06 http://www.ncbi.nlm.nih.gov/pubmed/16908791

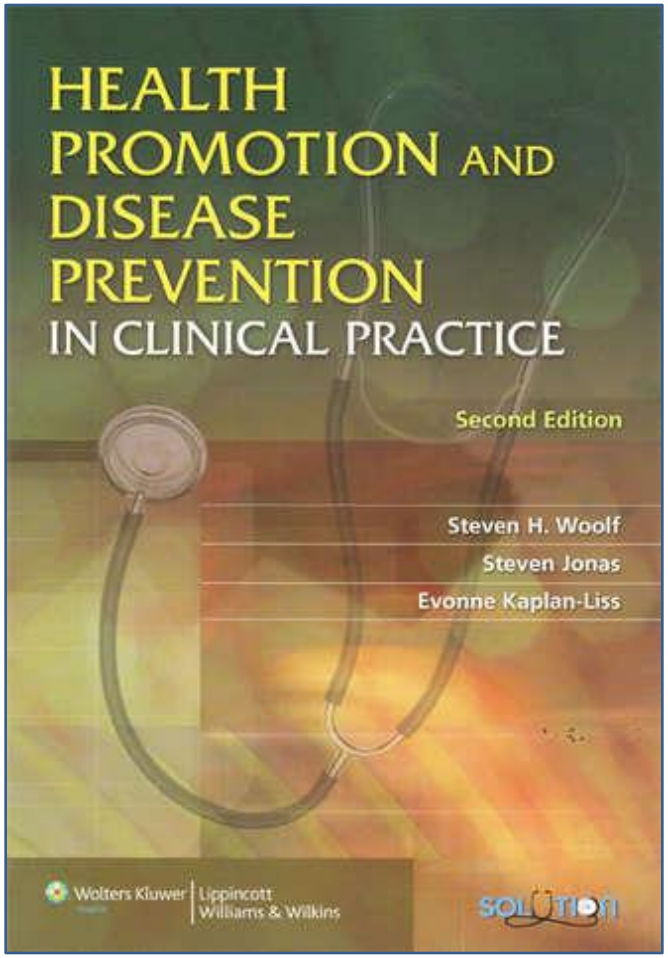
Rx drugs: #1 cause of death by poisoning



http://www.cdc.gov/HomeandRecreationalSafety/Poisoning/brief_full_page.htm

So What Do We Do?

- Focus every available health care provider on health promotion and prevention as part of their practice



Dr. Will Evan's Health Promotion Triad